VQS0254

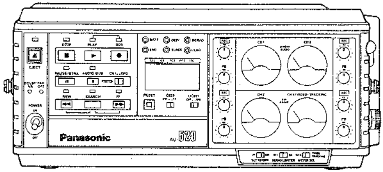
Service Manual

Panasonic MII

PORTABLE VTR

AU-520S
AU-520

Operating Instructions
Feature and Technical Explanation
Maintenance and Mechanical
Adjustment Procedures
Electrical Adjustment Procedures
Block Diagrams
Schematic Diagrams
Printed Circuit Board Diagrams
Exploded Views
Replacement Parts Lists


STOP
PLAY
REC
EJECT
PAUSE/STILL
AUDIO DUB
REW
SEARCH
FF
POWER
CH1
CH2
Panasonic
AU 520

MODEL: AU-520S
AU-520

PAL

Panasonic

INTRODUCTION

This Service Manual contains technical information in which service personnel can service the following Panasonic MII VTRs.

AU-520S	MII Portable VTR for Broadcast Use
AU-520	MII Portable VTR for Professional and Industrial Use

This Service Manual includes the following sections.

1. OPERATING INSTRUCTIONS
2. TECHNICAL EXPLANATIONS
3. MAINTENANCE & MECHANICAL ADJUSTMENTS
4. ELECTRICAL ADJUSTMENTS
5. MODULES
   - Block Diagrams
   - Schematic Diagrams
   - Printed Circuit Boards
6. EXPLODED VIEWS & PARTS LISTS

OPERATING INSTRUCTIONS

This instruction is just an over-view.
Detailed procedures are supplied in the operating instructions for the AU-520/520S.

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Specifications

General

Power Supply: DC 12 V +3/−1.2 V
Power Consumption: 42 W (31 W at normal recording, MAX. 65 W with camera)

Recording System: 4 rotary heads; 2-track helical scanning
Tape Speed: 66.295 mm/sec.
Tape: ½″ Metal Particle (MP) Tape
Recording Time: 97 minutes (with AU-M90L)
Search Speed: ±5×
FF/REW Time: Less than 6 minutes with AU-M90L.
Operating Temperature: 0°C~40°C
Operating Humidity: Less than 85%
Dimensions (W×H×D): 280 mm×120 mm×330 mm
Weight: 7.3 kg
without cassette and battery

▨ is the safety information.

Video

			AU-520	AU-520S
Television Format			PAL; 625 lines, 50 fields	
Modulation System	Y		Frequency modulation	
	C (P$_B$/P$_R$)		Time compressed multiplexing	
Bandwidth	Y		25 Hz~5.0 MHz $^{+1.0}_{-2.0}$ dB	25 Hz~5.0 MHz ±0.5 dB
	C (P$_B$/P$_R$)		25 Hz~1.8 MHz $^{+1.0}_{-2.0}$ dB	25 Hz~1.8 MHz ±0.5 dB 2.0 MHz −3.0 dB
S/N Ratio	Y	WIDE-BAND	Better than 47 dB	Better than 47 dB
	C	P$_B$/P$_R$	Better than 48 dB	Better than 48 dB
		AM	Better than 48 dB	———
		PM	Better than 50 dB	———
Y/C Delay			Less than 20 ns	Less than 20 ns
K Factor	Y (2T)		Less than 2%	Less than 1.5%
	C (5T)		Less than 3%	Less than 2%
Linearity			Less than 3%	Less than 3%

Audio

		AU-520	AU-520S
Linear (CH1/CH2)			
Frequency modulation		50 Hz~15,000 Hz $^{+2.0}_{-3.0}$ dB	50 Hz~15,000 Hz $^{+1.0}_{-2.0}$ dB
S/N (at 3% distortion)	Dolby NR OFF	Better than 56 dB	Better than 58 dB
Distortion (at 1 kHz standard input level)		Less than 1.0%	Less than 0.8%
Erase (1 kHz)		Less than −65 dB	Less than −70 dB
Wow and Flutter (DIN WTD)		Less than 0.15%	Less than 0.15%
Cross Talk (at 1 kHz standard input)		———	Less than −55 dB
FM (CH3/CH4)			
Frequency modulation		20 Hz~20,000 Hz $^{+1.0}_{-2.0}$ dB	20 Hz~20,000 Hz $^{+0.5}_{-2.0}$ dB
Dynamic Range		More than 80 dB (A-curve)	More than 80 dB
Distortion (at 1 kHz standard input level)		Less than 0.5%	Less than 0.5%
Cross Talk (at 1 kHz standard input level)		Less than −65 dB	Less than −65 dB

Video Input Signal

VIDEO IN: BNC×1
1.0 Vp-p 75Ω
SC IN: BNC×1
2.0 Vp-p 75Ω
SYNC IN: BNC×1
4.0 Vp-p 75Ω
CAMERA IN: 26P Multiconnector
Video In; 1.0 Vp-p 75Ω
Y In; 1.0 Vp-p 75Ω
P$_R$ In; 0.7 Vp-p 75Ω
P$_B$ In; 0.7 Vp-p 75Ω
RETURN VIDEO; 1.0 Vp-p 75Ω
(Condition: 100 % colour bar)

Video Output Signal

VIDEO OUT: BNC×2
Video Out 1.2; Composite out 1.0 Vp-p 75Ω
CTCM OUT: 12P Multiconnector
Y; 1.0 Vp-p 75Ω
C P$_R$′, P$_B$′; 0.7/0.7 Vp-p 75Ω
Y DO Pulse; NEG
C DO Pulse; NEG
SPARE: DIN×1

Audio Input Signal

AUDIO IN: XLR 3P×4
CH1/CH2 (Linear) CH3/CH4 (FM)

CAM/LINE: LINE;
(Switchable)

HIGH	MID	LOW	
0 dBu	−20 dBu	−60 dBu	100 nWb/m
+6 dBu	−14 dBu	−54 dBu	200 nWb/m

More than 3 kΩ/10 kΩ balanced

CAM;
(Switchable on Printed Circuit Board)

HIGH	MID	LOW	
−20 dBu	−30 dBu	−60 dBu	100 nWb/m
−14 dBu	−24 dBu	−54 dBu	200 nWb/m

More than 3 kΩ/10 kΩ balanced

TIME CODE IN: LEMO×1
0.5 Vp-p to 8 Vp-p high impedance balanced

Audio Output Signal

AUDIO OUT: XLR 3P×4
(Switchable within PC Board)

HIGH	LOW	
0 dBu	−20 dBu	100 nWb/m
+6 dBu	−14 dBu	200 nWb/m

Less than 50Ω balanced

TIME CODE OUT: LEMO×1
2.2 Vp-p low impedance balanced
HEADPHONE OUT: 6.3 mm phone stereo jack
−18 dBu~−∞ 8Ω

Specifications are measured when played back with standard studio recorder.

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Features

High Quality Picture
By adopting the comb filter, even though the AU-520 employs a ½″ metal tape, the excellent quality of the pictures it records is on a par with that produced by a 1″ VTR.

Bult-in VIDEO AGC (Automatic Gain Control) Circuit
The video level can be adjusted at optimum level, and can be recorded at minimal distortion even with sudden and excessively high input levels.

Compact, Lightweight Portable VTR
PANASONIC has succeeded in reducing the weight of this VTR inclusive of the batteries and cassette. The VTR is also compactly designed. These features go hand in hand with the low power consumption to make this portable model invaluable in a wide range of applications as an extremely mobile and versatile machine.

Internal Time Code Generator/Reader
The internal time code generator allows the EBU time code to be recorded simultaneously with the video and audio signals. Moreover, simply by setting a switch, the VITC (Vertical Interval Time Code) can be recorded simultaneously in any two lines of the vertical blanking period. The time code reader enables the time codes to be reproduced and read when the machine is set to the playback mode.

Independently Provided Time Code Track
The time code track is provided separately from the video signal track, and it is on this track that the time code is recorded.

Time Code Slave Lock
The internal time code generator can be locked to an external generator.

Simultaneous Playback Function
This portable unit has playback heads, for both audio and video, in addition to the recording head. This is so the user can review the quality of the recorded material in the field. By use of this system, a recording can be performed, while simultaneously examining for head clogging. The simultaneous playback picture can be obtained in the viewfinder, and in case of clogging, a warning signal is indicated by a flashing LED.

4-Channel Audio Recording (2 Linear Channels and 2 FM Channels)

Audio Level Control and Limiter Recording
The recording level can be adjusted manually and when the limiter is ON, sound can be recorded at minimal distortion even with sudden and excessively high input levels. It is also possible to adjust the level of the playback signals.

Dolby NR System
A Dolby* C Noise Reduction System is featured for the linear audio signals. It can be switched ON and OFF as required.

Audio Dubbing
Sound can be added to pre-recorded tapes by recording on the 2 linear audio channels.

Prevention of Erroneous Operation
The machine is designed so that while recording none of the function buttons except STOP and PAUSE/STILL can be operated.
If the KEY INHIBIT switch is set to ON, none of the function buttons will work at all.

Extremely Precise Recording Continuity
A new servo system makes sure that recordings can be carried out without disturbing the flow of the pictures which have been recorded in sequence.

Warning System
The AU-520 has a system based on an array of indicator lamps and beeps which warn the operator of tape-end, tape wind-up, servo system malfunctioning, dew condensation, battery charge depletion and head clogging.

Search Function
Playback pictures (in black-and-white only) can be viewed in both the forward and reverse directions at a speed approximately equivalent to 5 times the normal tape speed.

Connection with Time Base Corrector (TBC)
The AU-520 can be hooked up with the AU-TB50B Time Base Corrector.

Remote Control
A 9-pin connector for RS-422A serial control can be hooked up to the AU-520 so that it will function as a source machine.

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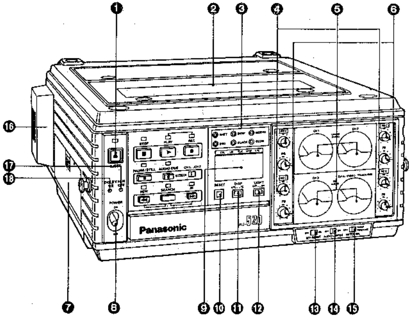
*Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

*"Dolby" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

Controls and their Functions

1. Front Panel



1. **EJECT Button/Lamp**
When this button is pressed, the cassette holder rises and a cassette can be inserted or removed.

2. **Cassette Holder**
This is where the cassette tape is inserted. Both standard and small cassettes can be used.

3. **Warning Lamps**

CLOG: This flashes to tell the operator that recording cannot be conducted because the video heads are clogged or because the recording circuitry has malfunctioned.

SERVO: This flashes to tell the operator that the drum servo or capstan servo is not locked.

DEW: This flashes to tell the operator that dew has formed on the head drum or that the humidity is high. If it flashes during a recording, the machine continues in the recording mode; if it flashes in any other mode, it is placed in the stop mode.

SLACK: This flashes to tell the operator that the tape has developed slack in the tape transport system or that the drum has stopped rotating. The machine is placed in the stop mode when it flashes.

TAPE END: This flashes to tell the operator that the tape has reached the end during a recording.

BATT: This flashes when the charge in the battery pack being used is becoming depleted.

4. **AUDIO REC LEVEL CH1 to CH4 controls**
Pull out this control in EE mode to set the maximum audio level to 0 on the meter.
- To adjust the audio level of CH4, set the METER SELECT switch to "CH4" and then perform the above operation.

5. Level Meters
The CH1 to CH3 meters indicate the recording or playback level of audio CH1 to CH3, and the CH4/VIDEO/TRACKING meter indicates the audio CH4 recording/playback level or video recording input level/tracking level by selecting the METER SELECT switch.

6. **AUDIO PB LEVEL CH1 to CH4 controls**
Pull out this control in playback mode to set the maximum audio level to 0 on the meter.
- To adjust the playback level of CH4, set the METER SELECT switch to "CH4" and then perform the above operation.

7. **Battery Compartment (side panel)**
This houses one AU-BP402 battery pack or two AU-BP220 packs.

8. **POWER Switch**
This switches the power on and off.
Power will also be supplied to a camera.

9. **Display**
This displays the control track time, time code, user bits or battery capacity information.

10. **RESET Button**
- If the control signal is displayed, its value is reset to zero.
- If time code is displayed, it is reset to zero, if the SHIFT button is pressed simultaneously with this button.

11. **DISPLAY Button**

CTL: When it is desired to display the control signal information.

TC: When it is desired to display time code information.

12. **LIGHT Switch**
This switch controls illumination of the display and the audio level indicator.

13. **KEY INHIBIT Switch**

ON: At this position, none of the buttons except the VTR start/stop on the camera is operational. The switch prevents any button from being pressed in error and the unit from being transferred to another operational mode. It is set to ON even when connecting and controlling the RS-422A remote functions.

OFF: At this position, any button is operational except in the recording mode. Even when the switch is at OFF during a recording, only the STOP and PAUSE/STILL buttons will be functional.

14. **AUDIO LIMITER Switch**

ON: The limiter circuit operates to cut off the excessive audio when the audio is momentarily input over the reference level.

OFF: The audio input is recorded as it is.

15. **METER Selector Switch**

CH4: When setting or displaying the recording or playback level of audio CH4.

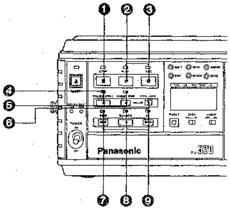
VIDEO/ TRACKING: When setting or displaying the recording level of video input or tracking level.

16. **Fan**

17. **Fan OFF Lamp**
This lamp lights up when the Fan ON/OFF Switch is turned OFF and the fan does not work. (See page E-13 "FAN ON/OFF Switch".)
When the lamp flashes, the unit's temperature is high. In this case turn ON the Fan ON/OFF Switch.

18. **DOLBY NR Lamp**
This lamp lights up when the Dolby NR Switch is turned ON.

2. Operation Buttons



1. **STOP Button/Lamp**
   The tape stops when this button is pressed.

2. **PLAY Button/Lamp**
   The tape plays back and the lamp lights when this button is pressed. The button is pressed together with the REC button to initiate recording or with the AUDIO DUB button to initiate audio dubbing.

3. **REC Button/Lamp**
   Recording starts and the lamp lights when this button is pressed together with the PLAY button. When it is pressed while the tape has stopped, the E-E mode pictures and sound can be monitored. This function can be used when adjusting the recording level or determining the camera angle.

4. **PAUSE/STILL Button/Lamp**
   When this button is pressed, the tape being recorded or played back stops temporarily and the lamp lights. Press the button again to release the pause function and return the machine to its previous mode. When the machine is placed in the pause mode during a recording, the E-E mode pictures can be viewed on the screen.
   When it is pressed during playback, a still picture will appear. If the machine is placed in the pause mode for more than 7 minutes, the tape protection function will be activated and the machine will go into the power saving (tape is unloaded) mode.

5. **AUDIO DUB Button/Lamp**
   Press this button together with the PLAY button when subsequently adding and dubbing sound on audio track CH1 or CH2 of the tape.

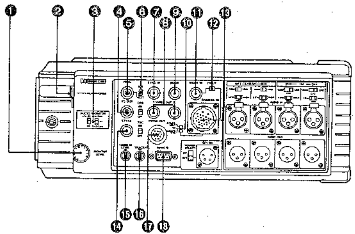
6. **Audio CH1/CH2 Selector**
   When the audio dubbing is desired, set the switch to CH1 or 2 to be dubbed.

7. **REW Button/Lamp**
   The tape rewinds and the lamp lights when this button is pressed.
   To view playback pictures (in black-and-white only) in the search mode, first press the SEARCH button and then press the REW button. Press the STOP button and then REW button to return to normal tape rewinding.

8. **SEARCH Button/Lamp**
   When pressed, this button allows the playback pictures in the search mode to be viewed at approximately 5 times the normal tape speed. Black-and-white search pictures can be viewed in either the reverse direction or forward direction if the REW button or FF button is pressed, respectively, while the SEARCH lamp is lighted.

9. **FF Button/Lamp**
   The tape fast forwards and the lamp lights when this button is pressed.
   To view playback pictures (in black-and-white only) in the search mode, first press the SEARCH button and then press the FF button. Press the STOP button and then FF button to return to normal tape fast forwarding.

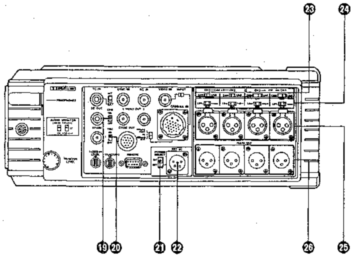
3. Side Panel



1. **MONITOR LEVEL Control**
   This adjusts the sound level supplied to the HEADPHONES jack.
2. **HEADPHONES Jack (6.3 mm Phone stereo jack)**
   Connect stereo headphones for sound monitoring to this jack. The sound of the channel selected by the MONITOR selector switch on the side panel will be heard in both ears.
   Warning beeps will be heard while the warning lamp is flashing.
3. **Audio Monitor Channel Switches**
   These are the AUDIO monitor select switches.

	↑		↓	
	L	R	L	R
↑	CH1	CH1	CH3	CH3
↕	CH1	CH2	CH3	CH4
↓	CH2	CH2	CH4	CH4

4. **TIME CODE OUT Connector (LEMO)**
   This is the output connector for the time code. The following time codes are available at this connector:
   - Time code recorded on the tape when the machine is set to the playback mode.
   - The time code generated by the internal time code generator.
   - The internal time code generator synchronized with the time code supplied to the TIME CODE IN connector.
5. **TIME CODE IN Connector (LEMO)**
   This is the input connector for an external time code generator when the time code is to be recorded from an external source.
6. **TC INT/EXT Selector Switch**
   This is a selector switch for the time code generator.
   INT: Set the switch to this position when using the internal time code generator to record the time code.
   EXT: Set the switch to this position when using an external time code generator to record the time code.
7. **SYNC IN Connector (BNC)**
   Connect this connector to the ADV SYNC OUT connector of a TBC when synchronizing the unit with an external sync signal. The playback signal from this unit will be synchronized with the external sync signal.
8. **VIDEO OUT 1, 2 Connectors (BNC)**
   These are the output connectors for the composite video signals. Connect to a time base corrector, another VTR or video monitor. Signals are output simultaneously from both connectors 1 and 2.
   - When connecting the VIDEO OUT 2 connector to the TV Monitor, control and the time code can be superimposed on the screen.
9. **SC IN Connector (BNC)**
   This is connected to the subcarrier from a time base corrector (TBC) when the TBC is connected. The colour signals, which are the playback signals of the machine, will then be synchronized with the subcarrier signal.
10. **COMPONENT/YC/COMPOSITE Selector Switch**
    This switch is set in accordance with the type of video camera connected to the CAMERA IN connector.
    COMPONENT: Set the switch to this position when recording a component signal.
    YC: Set the switch to this position when recording a YC signal.
    COMPOSITE: Set the switch to this position when recording a composite video signal.
11. **VIDEO INPUT Connector (BNC)**
    This is connected to the output connector of a camera, VTR or composite video signal. Setting the INPUT selector switch to VIDEO IN enables the signals which have been connected to be recorded.
12. **VIDEO INPUT Selector Switch**
    This selects the video input signals to be recorded.
    VIDEO IN: For recording the video signals connected to the VIDEO IN connector.
    CAMERA IN: For recording the video signals connected to the CAMERA IN connector.
13. **CAMERA IN Connector (26-pin multi-connector)**
    This is connected to the 26 pin multi-connector on the video camera. The camera video and audio signals as well as the power supply and the control signal from the AU-520 can be transferred using this connector. The INPUT selector switch is set to CAMERA IN when the signals supplied to this connector are to be recorded.
    When component output camera signals are supplied, the component signals can be recorded.
14. **SPARE Connector (DIN Connector)**
15. **VIDEO IN LEVEL Control**
    This adjusts the recording level of the video signals (composite) supplied from the VIDEO IN and CAMERA IN connectors. When the METER selector switch on the control panel is set to VIDEO/TRACKING, this control is adjusted so that the CH4/VIDEO/TRACKING meter pointer deflects into the blue area.
    Normally, it is kept at its centre (detent) position.
16. **TRACKING Control**
    This adjusts any tracking deviation generated when a pre-recorded tape is played back on another VTR. Normally, it is kept at its centre (detent) position.
17. **CTCM OUT Connector (12-pin multi-connector)**
    This output connector is for the component video signal. It serves to output the MII series VTR component video signals.
18. **REMOTE Connector (9-pin)**
    This is a remote connector which is used to remotely operate the unit using RS-422A serial data.



19. **CPB (Confidence Playback) Switch**
    ON: Simultaneous playback is activated.
    OFF: Simultaneous playback is not used.
    The simultaneously played back picture can be seen in the viewfinder during recording and the audio can be monitored as well.

20. **TBC Switch**
    Set the switch to ON when the unit is used with a Time Base Corrector.

21. **POWER SELECT Switch**
    This switch is used to select the type of power supply.
    INT: Set the switch to this position when supplying power from Battery Pack.
    EXT: Set the switch to this position when supplying power from AC Adaptor AU-B110 (external power supply input).

22. **DC IN Connector (XLR 4-pin connector)**
    This supplies the DC power from the optional AU-B110 AC Adaptor when the machine is operated using an AC power supply.

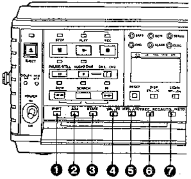
23. **AUDIO IN CH1 to CH4 Selector Switches**
    These switches are used to select the audio signal to be recorded.
    LINE: Set each switch to this position when recording an audio signal connected to AUDIO IN.
    CAM: Set each switch to this position when recording the signal from a camera connected to the CAMERA IN (26-pin multi-connector) Connector.
    CH1: When the switch to this position, the audio connected to CH1 (Linear) can also be recorded on CH3 track (FM) with no connection on CH3.
    CH2: When the switch to this position, the audio connected to CH2 (Linear) can also be recorded on CH4 track (FM) with no connection on CH4.

24. **AUDIO IN Level Selector Switches**
    These can be set to LOW, MID and HIGH in line with the level of the signals supplied to the AUDIO IN channel 1, channel 2, channel 3 or channel 4 connector.

25. **AUDIO IN CH1 to CH4 Connectors (XLR 3-pin)**
    These are audio signal input connectors.
    Connect them to a microphone or other signal source.

26. **AUDIO OUT CH1 to CH4 Connectors (XLR 3-pin)**
    These are audio signal output connectors.
    Connect them to an audio monitor, etc.

4. Front Sub-Panel



1. **SHIFT Button**
   - Press this button to set the time code.
   - Used to shift the flashing indicator of the time code display from one position to the next, and to select the appropriate characters to be set. Pressing the button each time causes the flashing position to be shifted to the right. When the right-hand end is reached, the next SHIFT will move the flashing indication to the extreme left-hand side.

2. **ADJ Button**
   This will change the number that is selected by the flashing indication position. Pressing the button once advances the number by one, and continually pressing it causes the number to advance rapidly.
   When application is to set the user bits, the characters 0 through 9, and A, b, C, d, E, F; are repeated.

3. **START Button**
   After setting the time code, this button is used to commence the time code count. In the FREE RUN mode, the time code is initiated when this button is pressed. In REC RUN mode, the time code is activated only during recording.

4. **TC/UB Switch**
   TC: Selects time code data.
   UB: Selects the user bits data.

5. **LTC/VITC Switch**
   LTC: Selects setting or displaying the longitudinal time code.
   VITC: Selects setting or displaying the Vertical Interval Time Code (VITC).

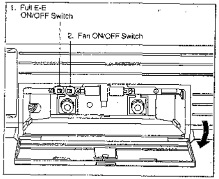
6. **REC RUN/FREE RUN Switch**
   REC: The VTR will record time code, whose count advances only in the REC mode.
   FREE: The VTR will record the time code that is constantly advancing, regardless of which mode the VTR is in.

7. **AUTO/NSTD Switch**
   Set the selector according to the form of the composite signal from the VIDEO IN terminal.
   AUTO: At this position, the selector automatically judges whether the input composite signal is a standard signal or a non-standard signal for recording. Normally set the selector to this position.
   NSTD: Set the selector to this position for recording only the non-standard signal (3/4" VTR, etc.)

5-5. FULL E-E/FAN ON/OFF Switch

FULL E-E ON/OFF and FAN ON/OFF Switches are located behind the battery compartment cover.

- Remove the battery compartment cover.



1. **Full E-E ON/OFF Switch**
   ON: Input signal is output after processing (Full E-E mode).
   OFF: Input signal is output as it is (Through mode).

2. **FAN ON/OFF Switch**
   When you require a quiet environment, you can eliminate fan noise by turning off the fan. In this case, the FAN OFF lamp on the front panel will light.

- Replace the battery compartment cover after selecting.

Warning System

The warning lamps and headphones warn the operator of the status of the AU-520. Refer to the table below. The VTR Lamp on the viewfinder flashes to warn that the trouble may be occurred on the VTR side.

Warning lamp		Head-phone beep	State warned	Operating status of the VTR
Lamp	Operation			
SERVO	Recording Playback, audio dubbing	〰	Out-of-lock servo	Recording operation can be continued but signals will not be recorded properly. Check out the connections.
DEW	All modes	〰	Dew condensation	If the machine is recording, the recording can be continued unless the tape is stuck. If the tape is stuck or the machine is in any other mode, the unit will stop. Press the EJECT button and remove the cassette.
SLACK	All modes	〰	Tape slack	Recording stops. Remove the tape.
TAPE END	Recording		Approaching tape end	Recording can be continued.
	All modes		Tape end	Recording stops. Replace the cassette.
BATT	All modes		Battery charge nearly depleted	Recording can be continued.
	All modes		Battery charge depleted	Recording stops. Replace with fully charged battery pack.
CLOG	Recording	〰	Clogged video heads	Recording operation can be continued but signals will not be recorded properly. Clean the heads.

1. Dew Condensation

If the unit is moved from a cold to a warm atmosphere, or if it is used in an area of high humidity, moisture (dew) may accumulate on the cylinder. If the unit is used under such conditions, the cylinder and/or tape may be damaged. Therefore, before inserting a cassette, turn ON the POWER switch, and verify that the DEW lamp warning is not displayed.

- Avoid using the unit in a place where a dew accumulation problem is prone to occur.
- Prior to moving the unit, remove the cassette tape.
- If the DEW condition is indicated with a cassette tape inserted, take the following course of action.

Set the POWER switch to ON.

↓

Press EJECT button to remove the cassette.

↓

Wait until DEW indication is no longer displayed, with POWER switch ON.

↓

When the DEW indicator goes out, load the tape, and confirm that the operation of the VTR is normal.

2. Head Clogging

When the head clogging is occurred during camera recording (including simultaneous playback), 5 blanking bars can be seen on the camera viewfinder.

3. Head Cleaning

When head cleaning is required, it is recommended to use the Panasonic head cleaning tape. It must be used correctly, according to the directions, otherwise the video heads will be damaged. Please read the instructions supplied with the cleaning cassette carefully to avoid any possible damage to the video heads.

Emergency Eject

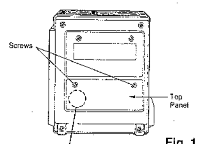


Fig. 1

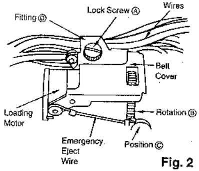


Fig. 2

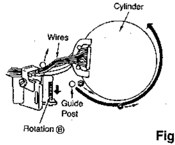


Fig. 3

❶ Turn off the power of the VTR.

❷ Remove the top panel. (Fig. 1)

❸ Unscrew the Lock Screw Ⓐ on the Loading Motor using the screwdriver. (Fig. 2)

❹ Open the Belt Cover. (Fig. 2)

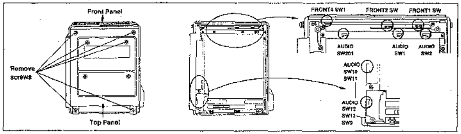
❺ In order not to damage the tape, open and return the Belt Cover a few times and then turn the Rotation Ⓑ as illustrated until the cassette tape can be ejected. (Fig. 3)

❻ When finished, close the Belt Cover and screw the Lock Screw Ⓐ.
Note:
Be sure that the Emergency Eject Wire is suspended on the position Ⓒ.

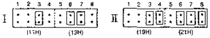
Notes:
- When opening the Belt Cover, VTR cannot be operational.
- Do not use the Emergency Eject except the machine's trouble.
- Do not touch the wires come out from the Cylinder.
- When tighten the Lock Screw, make sure that the wires is fixed by the Fitting Ⓓ.

Printed Circuit Board

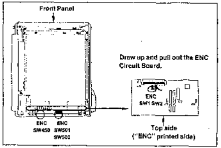
•Remove the Top Panel of the unit


Front Panel
Remove screws
Top Panel
FRONT4 SW1
FRONT2 SW
FRONT1 SW
AUDIO SW201
AUDIO SW1
AUDIO SW2
AUDIO SW10 SW11
AUDIO SW12 SW13 SW9

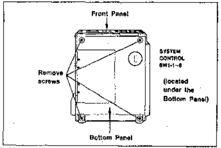
<table>
<tr><th>Board</th><th>Name</th><th>Full name</th><th>Adjustment notes</th><th>Shipment mode</th></tr>
<tr><td>AUDIO MAIN</td><td>SW1</td><td>LINEAR Audio Output Level Switch</td><td>HIGH/LOW selection.
HIGH/LOW: 0/−20 dBu (100 nWb/m), +6/−14 dBu (200 nWb/m)</td><td>HIGH</td></tr>
<tr><td></td><td>SW2</td><td>Dolby C NR System ON/OFF Switch</td><td>ON: Selected with the Dolby C NR System.
OFF: Selected without the Dolby C NR System.</td><td>OFF</td></tr>
<tr><td></td><td>SW201</td><td>FM Audio Output Level Switch</td><td>HIGH/LOW selection.
HIGH/LOW: 0/−20 dBu (100 nWb/m), +6/−14 dBu (200 nWb/m)</td><td>HIGH</td></tr>
<tr><td>AUDIO INPUT</td><td>SW9</td><td>Camera Input Level Switch</td><td>HIGH/MID/LOW selection.
HIGH/MID/LOW: −20/−30/−60 dBu (100 nWb/m), −14/−24/−54 dBu (200 nWb/m)</td><td>LOW</td></tr>
<tr><td></td><td>SW10
~
SW13</td><td>Phantom MIC Power ON/OFF Select Switch</td><td>ON: Power is supplied to the Phantom Microphone.
OFF: Power is not supplied to the Phantom Microphone.</td><td>OFF</td></tr>
<tr><td>FRONT 1</td><td>SW</td><td>UB Real Time Switch</td><td>W1: VITC-UB is used as the internal real time clock.
W2: LTC-UB is used as the internal real time clock.</td><td>NOT USED</td></tr>
<tr><td>FRONT 2</td><td>SW1-1~8</td><td>VITC Line Select Switch

Note: Two lines are selectable.
Be sure not to select the same line.
(12H is always blanked.)</td><td>Insert VITC to lines 7~22H.
When the jumping switch is placed on the bit, the mode is ON and the blanking occurs. Inserting lines are shown below.

1 2 3 4 5 6 7 8
I
(11H)
(13H)
1 2 3 4 5 6 7 8
II
(19H)
(21H)
<table>
<tr><th>VITC Insert Position</th><th>1 POINT
5 POINT</th><th>2 POINT
6 POINT</th><th>3 POINT
7 POINT</th><th>4 POINT
8 POINT</th></tr>
<tr><td>7H</td><td>OFF</td><td>OFF</td><td>OFF</td><td>OFF</td></tr>
<tr><td>8H</td><td>ON</td><td>OFF</td><td>OFF</td><td>OFF</td></tr>
<tr><td>9H</td><td>OFF</td><td>ON</td><td>OFF</td><td>OFF</td></tr>
<tr><td>10H</td><td>ON</td><td>ON</td><td>OFF</td><td>OFF</td></tr>
<tr><td>11H</td><td>OFF</td><td>OFF</td><td>ON</td><td>OFF</td></tr>
<tr><td>12H</td><td>ON</td><td>OFF</td><td>ON</td><td>OFF</td></tr>
<tr><td>13H</td><td>OFF</td><td>ON</td><td>ON</td><td>OFF</td></tr>
<tr><td>14H</td><td>ON</td><td>ON</td><td>ON</td><td>OFF</td></tr>
<tr><td>15H</td><td>OFF</td><td>OFF</td><td>OFF</td><td>ON</td></tr>
<tr><td>16H</td><td>ON</td><td>OFF</td><td>OFF</td><td>ON</td></tr>
<tr><td>17H</td><td>OFF</td><td>ON</td><td>OFF</td><td>ON</td></tr>
<tr><td>18H</td><td>ON</td><td>ON</td><td>OFF</td><td>ON</td></tr>
<tr><td>19H</td><td>OFF</td><td>OFF</td><td>ON</td><td>ON</td></tr>
<tr><td>20H</td><td>ON</td><td>OFF</td><td>ON</td><td>ON</td></tr>
<tr><td>21H</td><td>OFF</td><td>ON</td><td>ON</td><td>ON</td></tr>
<tr><td>22H</td><td>ON</td><td>ON</td><td>ON</td><td>ON</td></tr>
</table></td><td>I: 11H, 13H
II: 19H, 21H</td></tr>
<tr><td>FRONT 4</td><td>SW1</td><td>Phantom MIC Power Voltage Select Switch</td><td>The switch can be set to 9 VDC or 48 VDC.</td><td>48 VDC</td></tr>
</table>

•Remove the Top Panel


Front Panel
Draw up and pull out the ENC Circuit Board.
ENC SW1 SW2
Top side ("ENC" printed side)
ENC SW450
ENC SW501 SW502

•Remove the Bottom Panel


Front Panel
Remove screws
SYSTEM CONTROL SW1-1~8
(located under the Bottom Panel)
Bottom Panel

Board	Name	Full name	Adjustment notes	Shipment mode
ENC	SW1	SUPER (VIDEO 2 OUT) ON/OFF Switch	A: (ON) Will superimpose the control signal or the time code in the active video to display on the TV screen. B: (OFF) Selected when superimposition is not required.	A (ON)
	SW2	Chroma Signal ON/OFF Switch	A: (ON) Chroma signal is not cut off. B: (OFF) Chroma signal is cut off.	A (ON)
	SW450	COMB FILTER Select Switch	ON: The Comb Filter for the Y signal is turned on. AUTO: The Comb Filter is selectively activated according to the presence or absence of a VISC signal. When a VISC signal is present, the Comb Filter is turned on. When a VISC signal is absent, the Comb Filter is turned off. OFF: The Comb Filter is turned off.	AUTO
	SW501 SW502	VISC/VITC Blanking Select Switch	Remove the VISC and VITC recorded on V blanking (7H~22H) during playback.	
			7~11H	OFF
			12 H (VISC)	ON
			13~22H	OFF
SYSTEM CONTROL	SW1-1	Frame Count Select Switch	ON: 25 frames OFF: 30 frames	ON
	SW1-2	9 P Serial Device Type Data Select Switch	ON: ID exclusively for AU-520 (A108H) OFF: ID data "1100H"	OFF
	SW1-3	E-E/TAPE Signal Select Switch	ON: E-E mode [In EJECT, STOP, FF and REW, the input signal is output or output after processing (depending on the SW1-4 selection) from VIDEO OUT Connector.] OFF: TAPE mode except EJECT, REC PLAY, REC PAUSE (In a mode other than EJECT and REC, the signal is output from VIDEO OUT Connector.)	OFF
	SW1-4	FULL E-E ON/OFF Select Switch	ON: FULL E-E mode (Input signal is output after processing.) OFF: Through mode (Input signal is output.)	OFF
	SW1-5	COLOUR FRAMING Select Switch	ON: At this position, colour framing is performed at intervals of 8 fields in relay picture recording. OFF: At this position, colour framing is performed at intervals of 2 fields in relay picture recording.	OFF
	SW1-6	PCB CHECK Select Switch	ON: Circuit board is checked. OFF: Circuit board is not checked	OFF
	SW1-7~8	——	——	OFF

Connectors Pin Signal

•CAMERA IN (26P)

Pin No.	Signal
1	COMPOSITE VIDEO
2	COMPOSITE VIDEO GND
3	Y GND
4	Y
5	P_R
6	P_R GND
7	P_B
8	P_B GND
9	CAMERA MIC (X)
10	CAMERA MIC (Y)
11	CAMERA MIC (G) GND
12	VTR START/STOP
13	BATTERY ALARM
14	TAPE REMAIN
15	REC/TALLY/WARNING
16	SPARE
17	SHIELD
18	PLAYBACK VIDEO
19	PLAYBACK VIDEO GND
20	VTR SAVE/AUDIO MONITOR
21	SPARE
22	COLOUR FRAMING PULSE
23	SPARE
24	SPARE
A	POWER+12 V DC
B	POWER GND

•CTCM OUTPUT (12P)

Pin No.	Signal
1	Y OUT
2	Y OUT GND
3	Y DO PULSE OUT
4	Y DO PULSE OUT GND
5	C DO PULSE OUT
6	C DO PULSE OUT GND
7	CTCM OUT
8	CTCM OUT GND
9	SEARCH 25 Hz
10	PLAY H1 Ⓛ
11	DUB Ⓛ REC 25 Hz
12	PAL Ⓛ ADV 25 Hz

•REMOTE (9P)

Pin No.	Signal
1	GND
2	TRANSMIT A
3	RECEIVE B
4	RECEIVE COMMON
5	SPARE
6	TRANSMIT COMMON
7	TRANSMIT B
8	RECEIVE A
9	GND

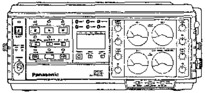
•AUDIO INPUT/OUTPUT (XLR-3P)

Pin No.	Signal
1	GND
2	HOT
3	COLD

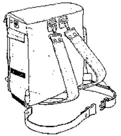
•EXT. DC IN (XLR-4P)

Pin No.	Signal
1	GND
2	SPARE
3	SPARE
4	+12 V

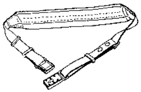
Associated Component Equipment



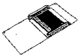
AU-520



Carrying Case AU-H500
(option)



Shoulder Strap VFC0089
(supplied)



Extension Board
VFK0404
(supplied)

TECHNICAL EXPLANATIONS

This section describes general technical concepts of the AU520/520S.

CONTENTS

1. GENERAL DESCRIPTION ……………………

1-1. Introduction ……………………

1-2. Tape Format ……………………

1-3. Tape Transport System ……………………

1-4. Recording Method ……………………

1-5. Overall ……………………

Panasonic

1. GENERAL

1-1. Introduction

The modern trend of broadcast field Video Recording is shifting from those using 2-inch tape to those using 1-inch tape, and their functions are becoming more diversified. In the ENG/EFP Fields, VTRs are being reduced in size and are using modern 1/2 inch tape cassettes. Regarding field VTRs, there has been an ever increasing desire for the reduction of VTR size, the use of cassette tape and cost savings from the view points of space, tape consumption, manu everaisity, etc.

To accommodate these situations, we have developed the M II Format VTR (AU-520) and peripheral equipment in an attempt to meet the following targets:

1) Greater than 90 min. recording using 1/2 inch cassette tape.
2) Picture quality equivalent to that of present broadcasting VTRs.

In order to achieve these goals, we have established the target specification of Table 1, and have additionally targeted the functions mentioned following:

1) Format capable of PCM audio recording.
2) Picture and audio playback monitoring during record(confidence playback).
3) Automatic backspace editing.
4) Built-in time code generator.
5) Dolby C noise reduction.
6) Built-in RF converter.

We shall introduce the recording system, signal processing and other notable features of the M II Format in this report.

The target specifications shall be made under following conditions.

1) 1st generation interchange.
2) Playback with AU-65/63/62.

Audio

		AU-520	AU-520S
Linear (CH1/CH2)			
Frequency modulation		50 Hz~15,000 Hz $^{+2.0}_{-3.0}$ dB	50 Hz~15,000 Hz $^{+1.0}_{-2.0}$ dB
S/N (at 3% distor-tion)	Dolby NR OFF	Better than 56 dB	Better than 58 dB
Distortion (at 1 kHz standard input level)		Less than 1.0%	Less than 0.8%
Erase (1 kHz)		Less than −65 dB	Less than −70 dB
Wow and Flutter (DIN WTD)		Less than 0.15%	Less than 0.15%
Cross Talk (at 1 kHz standard input)		———	Less than −55 dB
FM (CH3/CH4)			
Frequency modulation		20 Hz~20,000 Hz $^{+1.0}_{-2.0}$ dB	20 Hz~20,000 Hz $^{+0.5}_{-2.0}$ dB
Dynamic Range		More than 80 dB (A-curve)	More than 80 dB
Distortion (at 1 kHz standard input level)		Less than 0.5%	Less than 0.5%
Cross Talk (at 1 kHz standard input level)		Less than −65 dB	Less than −65 dB

Video

			AU-520	AU-520S
Television Format			PAL; 625 lines, 50 fields	
Modulation System	Y		Frequency modulation	
	C (PB/PR)		Time compressed multiplexing	
Bandwidth	Y		25 Hz~5.0 MHz $^{+1.0}_{-2.0}$ dB	25 Hz~5.0 MHz ±0.5 dB
	C (PB/PR)		25 Hz~1.8 MHz $^{+1.0}_{-2.0}$ dB	25 Hz~1.8 MHz ±0.5 dB 2,0 MHz −3.0 dB
S/N Ratio	Y	WIDE-BAND	Better than 47 dB	Better than 47 dB
	C	PB/PR	Better than 48 dB	Better than 48 dB
		AM	Better than 48 dB	———
		PM	Better than 50 dB	———
Y/C Delay			Less than 20 ns	Less than 20 ns
K Factor	Y (2T)		Less than 2%	Less than 1.5%
	C (5T)		Less than 3%	Less than 2%
Linearity			Less than 3%	Less than 3%

1-2. Tape Format

In order to achieve the above-mentioned targets (recording time, frequency response, S/N ratio), we have established the format and its dimensions by total evaluation of the following items:

1) Tape length – tape thickness and cassette size
2) Relative speed – drum diameter
3) Track width
4) FM carrier frequency & deviation
5) Tape CNR (carrier to noise ratio)

1). Cassette, Tape, Heads

[Cassette]

For the determination of cassette size, we took into account the points of recording length and good maneuverability. We decided to employ a size near equivalent to the VHS cassette.

[Employment of metal particle tape, amorphous and ferrite sendust complex heads]

To fulfill the requirements of high picture quality as well as 90 minute running time, and a near equivalent to the VHS cassette it was essential to raise the carrier-to-noise ratio (CNR) of the tape. In this respect, we employed metal particle tape (13.5 um thick) that has excellent high frequency characteristics (output characteristics, CNR) and is able to ensure sufficient output for longitudinal track recording (audio, control, time code).
To use metal particle tape, we needed to employ amorphous heads as video heads to improve the playback signal to noise ratio. In this way, excellent characteristics were obtained in recording and playback.

Table 2 is the comparison of characteristics between SHG tape (high density iron oxide tape) and metal particle tape.
Due to the metal particle tape and amorphous heads, CNR can be improved by about 6 dB when compared to SHG tape.

Using the new tape and heads, greater reliability characteristics are obtained such as drop-out resistance and endurance.

		SHG tape	Metal particle tape
Magnetic property	Hc	670 Oe	1500 Oe
	Br	1050 Gauss	2470 Gauss
	Br/Bm	0.82	0.80
Frequency response	0.5 MHz	0 dB	+3.3 dB
	3.0 MHz	0 dB	+5.7 dB
	5.0 MHz	0 dB	+6.6 dB
CNR	fc = 5 MHz Δf = 1 MHz	0 dB	+5.9 dB

Table 2 Comparison between SHG and Metal Particle Tape

2). Frequency allocation, drum diameter, and other dimensions

In the M II Format VTR, we employed a separate Y/C track component recording system that ensures wide band luminance (Y) and chrominance (C) signals as well as excellent SNR (signal to noise ratio).
In this system, Y and C are separately recorded through FM modulation so that high quality pictures can be obtained at lower FM carrier frequencies as compared with direct FM recording. Signals of high SNR can be reproduced with a relatively small drum diameter. However, to achieve picture quality equivalent to present broadcast VTRs, relatively high FM carrier frequencies and relatively large drum diameters (relative speed) are required.
We set the FM frequency deviation of the luminance signal to 6.63 – 7.2 MHz and that of the chrominance signal to 5.4 – 7.0 MHz (at 100% color bar), intending to attain sufficient performance with respect to SNR, frequency band, and waveform reproducibility (related to white–dark clip).

Regarding drum diameter, it was set to 76mm to make the recording wave length approximately 0.65 um (PAL) at peak white. The recording wave length of the luminance signal is 0.89 um (sync tip) – 0.65 um (peak white). The recording wave length at white clip is 0.44 um (white clip 270%).

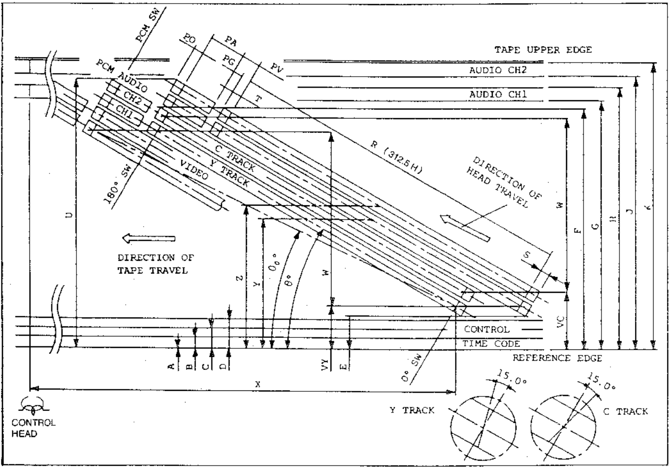

PCM SW
PO
PA
PG
PV
T
PCM AUDIO
CH2
CH1
TAPE UPPER EDGE
AUDIO CH2
AUDIO CH1
R (312.5H)
DIRECTION OF HEAD TRAVEL
C TRACK
Y TRACK
VIDEO
180° SW
U
DIRECTION OF TAPE TRAVEL
Z
Y
0°
8°
W
M
F
G
H
J
K
S
VC
CONTROL
TIME CODE
REFERENCE EDGE
A
B
C
D
VY
E
0° SW
X
CONTROL HEAD
Y TRACK
C TRACK
15.0°
15.0°

Fig. 1 Tape Format of M II VTR

Mark	Item	Nominal Value
A	Time code track lower edge	0 μm
B	Time code track upper edge	450 μm
C	Control track lower edge	900 μm
D	Control track upper edge	1,300 μm
E	Video track lower edge	1,497 μm
F	Video track upper edge	10,635 μm
G	Audio CH1 track lower edge	10,850 μm
H	Audio CH1 track upper edge	11,450 μm
J	Audio CH2 track lower edge	11,950 μm
K	Audio CH2 track upper edge	12,550 μm
L	Video track pitch	99.3μm
M	Y track width	56 μm
N	C track width	36 μm
P	Y - C track pitch	49.7μm
Q	Y - C track offset	4,533 μm
R	Video track length	118,058.3μm
S	Video leading overlap	1,333 μm
T	Video trailing overlap	1,322 μm

Mark	Item	Nominal Value
W	Effective video width	8,847.1 μm
VY	Effective video width lower limit (Y track)	1,626 μm
	Effective video width lower limit (C track)	1,676 μm
Y	Y track center height	6,050 μm
Z	C track center height	6,099.5 μm
θ	Video track angle	4.29770
PV	PCM audio recording point	2,703 μm
PG	Video PCM audio guard	1,351 μm
αH	H alignment	3.5 H
X	Control signal recording position	202,000 μm
	Tape to head relative speed	5.90 m
	Time code track width	450 μm
	Control track width	400 μm
	Audio CH1 track width	600 μm
	Audio CH2 track width	600 μm
	Tape travel speed	66.295mm/sec

1−3. Tape Transport System

Figure 2 shows the tape transport system of the M II Format VTR. In order to assure stable travel of the thin metal particle tape at a speed ranging from 0 (still) − to x(+−5), the angle at which tape is wrapped around inclined fixed posts is minimized. All other guide posts are the rotating type, thereby reducing tape traveling load. Closed tension servo is applied to both supply and take−up reels to accurately control the tape tension and to prevent the tape from being damaged.

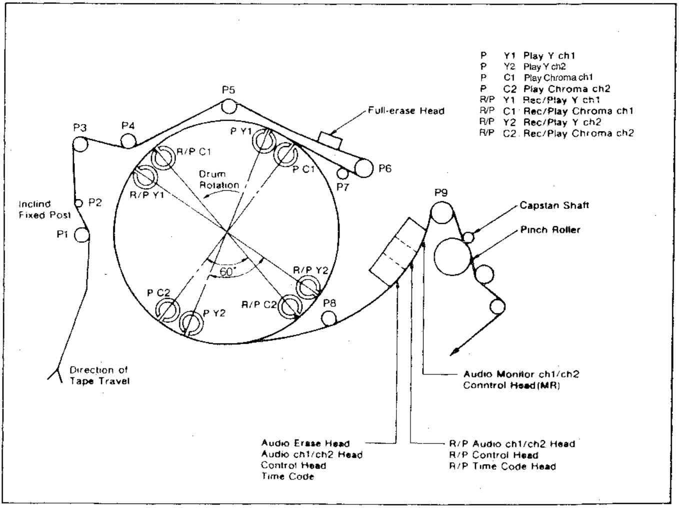

P Y1 Play Y ch1
P Y2 Play Y ch2
P C1 Play Chroma ch1
P C2 Play Chroma ch2
R/P Y1 Rec/Play Y ch1
R/P C1 Rec/Play Chroma ch1
R/P Y2 Rec/Play Y ch2
R/P C2 Rec/Play Chroma ch2
P5
P3
P4
Full-erase Head
P Y1
R/P C1
P C1
P6
P7
Drum Rotation
R/P Y1
P9
Inclind Fixed Post
P2
P1
Capstan Shaft
Pinch Roller
60°
R/P Y2
P C2
R/P C2
P8
P Y2
Direction of Tape Travel
Audio Monitor ch1/ch2
Conntrol Head(MR)
Audio Erase Head
Audio ch1/ch2 Head
Control Head
Time Code
R/P Audio ch1/ch2 Head
R/P Control Head
R/P Time Code Head

Fig. 2 Tape Transport System and Head

1–4. RECORDING METHOD

1) Y/C separate track, chrominance time compressed multiplex (CTCM).

In MII Format, a Y/C separate track component recording system is employed in order to obtain high quality pictures in relation to small size.

Representative systems that can record two color difference signals on one track at a high SNR are those mentioned following: (Ref. 1 and 2)

A) The FM/FM frequency division multiplex system in which the scale of circuitry is small and the time axis error is limited.

B) The chrominance time-compressed multiplex system, (time axis compressed time division multiplex) that can make effective use of the frequency band.

For MII Format, we employed the chrominance time compressed multiplex (CTCM) system that can make the best use of the limited transmission band of head/tape. This system allows color signal bands of 2.0MHz for the two color difference signals.

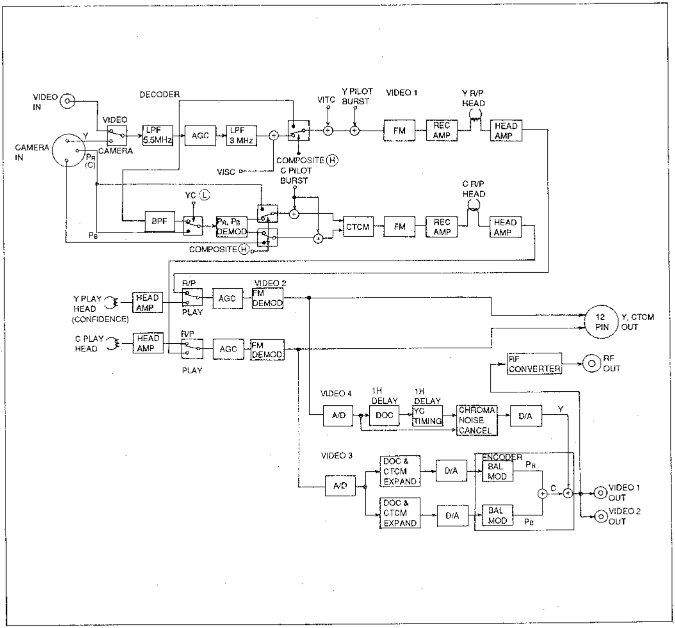

VIDEO IN
DECODER
VIDEO
CAMERA IN
Y
CAMERA
PR (C)
PB
LPF 5.5MHz
AGC
LPF 3 MHz
VITC
Y PILOT BURST
VIDEO 1
FM
REC AMP
Y R/P HEAD
HEAD AMP
COMPOSITE (H)
VISC
C PILOT BURST
YC (L)
BPF
PR, PB DEMOD
COMPOSITE (H)
C R/P HEAD
CTCM
FM
REC AMP
HEAD AMP
R/P
VIDEO 2
Y PLAY HEAD (CONFIDENCE)
HEAD AMP
PLAY
AGC
FM DEMOD
C PLAY HEAD
HEAD AMP
R/P
PLAY
AGC
FM DEMOD
12 PIN
Y, CTCM OUT
RF CONVERTER
RF OUT
VIDEO 4
1H DELAY
1H DELAY
A/D
DOC
YC TIMING
CHROMA NOISE CANCEL
D/A
Y
VIDEO 3
DOC & CTCM EXPAND
D/A
ENCODER
BAL MOD
PR
A/D
C
DOC & CTCM EXPAND
D/A
BAL MOD
PB
VIDEO 1 OUT
VIDEO 2 OUT

Fig. 3 Block Diagram of Video Signal Process

2). Video signal recording and reproducing process

This process consists of the recording section where the luminance and CTCM signals are frequency-modulated and recorded on tape through the recording amplifiers and R/P heads, and the playback section where the signal reproduced by the R/P heads or play heads through head amplifiers is picked up and guided to DUB OUTPUTs and a TBC after demodulation. To obtain a playback signal of high SNR and waveform reproducibility, it adopts non-linear emphasis to increase the amount of emphasis used for lower level signals in addition to the fixed main emphasis used before frequency modulation.

For both luminance and chrominance signals, the circuit constant for main emphasis is T=1.337 us, X=2.489, and non-linear emphasis is 8 dB max. The non-linear and main emphasis characteristics are shown in figure 4.

3). Time axis compressing and expansion process

For a system in which the time axis used for color difference signals is compressed during recording and is expanded during playback, a highly accurate time base corrector (TBC) is required because the residual jitter increases during expansion. In M II Format, a pilot burst signal for jitter correction is superimposed and recorded during the period of horizontal blanking, and a stable writing clock for the TBC is reproduced in the play-back process by the use of horizontal synchronizing and pilot burst signals superimposed and recorded, thereby reducing the residual jitter.

The Y and CTCM signal is recorded with a pilot burst signal (3.375MHz) synchronized to the horizontal sync signal and added to its horizontal blanking (back porch). A horizontal sync signal and pilot burst signal (1.6875MHz) are added to the horizontal blanking of the Pb signal. Both signals are separately compressed in time axis and are recorded as a time division multiplex signal.

Time base errors in the playback signal can be removed by using the horizontal synchronizing and pilot burst signals for Y/C timing, solving the problem of timing errors which has been the weak link in the time axis compression recording system. The recording signal waveform of M II Format is shown in figure 5.

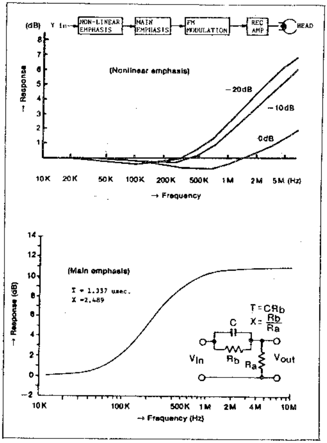


Fig. 4 Non-linear and Main Emphasis Characteristics

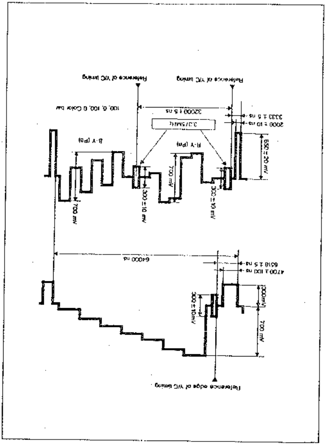
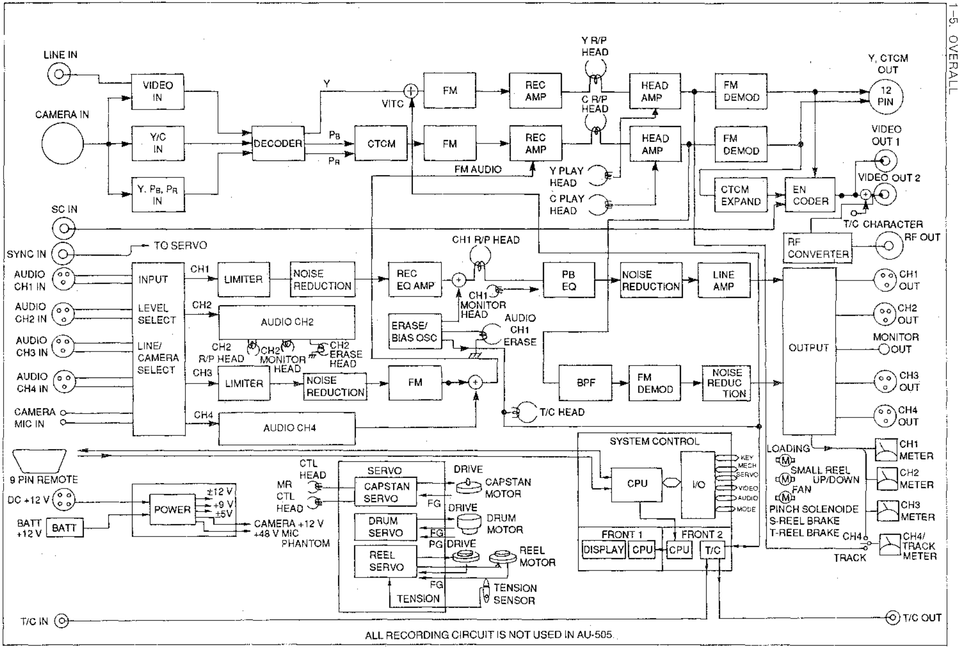


Fig. 5 Waveform of Recording Signal

1-5. OVERALL


LINE IN
CAMERA IN
VIDEO IN
Y/C IN
Y. PB, PR IN
DECODER
Y
PB
PR
CTCM
VITC
FM
FM
FM AUDIO
REC AMP
REC AMP
Y R/P HEAD
C R/P HEAD
Y PLAY HEAD
C PLAY HEAD
HEAD AMP
HEAD AMP
FM DEMOD
FM DEMOD
CTCM EXPAND
EN CODER
Y, CTCM OUT
12 PIN
VIDEO OUT 1
VIDEO OUT 2
T/C CHARACTER
RF CONVERTER
RF OUT
SC IN
SYNC IN
TO SERVO
AUDIO CH1 IN
AUDIO CH2 IN
AUDIO CH3 IN
AUDIO CH4 IN
CAMERA MIC IN
INPUT
LEVEL SELECT
LINE/ CAMERA SELECT
CH1
CH2
CH3
CH4
LIMITER
NOISE REDUCTION
AUDIO CH2
CH2 R/P HEAD
CH2 MONITOR HEAD
CH2 ERASE HEAD
LIMITER
NOISE REDUCTION
AUDIO CH4
REC EQ AMP
ERASE/ BIAS OSC
CH1 R/P HEAD
CH1 MONITOR HEAD
AUDIO CH1 ERASE
FM
T/C HEAD
PB EQ
NOISE REDUCTION
LINE AMP
BPF
FM DEMOD
NOISE REDUC TION
OUTPUT
CH1 OUT
CH2 OUT
MONITOR OUT
CH3 OUT
CH4 OUT
SYSTEM CONTROL
CPU
I/O
KEY
MECH
SERVO
VIDEO
AUDIO
MODE
FRONT 1
DISPLAY
CPU
FRONT 2
CPU
T/C
LOADING
SMALL REEL UP/DOWN
FAN
PINCH SOLENOIDE
S-REEL BRAKE
T-REEL BRAKE
CH1 METER
CH2 METER
CH3 METER
CH4/ TRACK METER
CH4
TRACK
9 PIN REMOTE
DC +12 V
BATT +12 V
BATT
POWER
±12 V
+9 V
±5V
CAMERA +12 V
+48 V MIC PHANTOM
CTL HEAD
MR CTL HEAD
SERVO
CAPSTAN SERVO
DRUM SERVO
REEL SERVO
TENSION
DRIVE
CAPSTAN MOTOR
FG
DRIVE
DRUM MOTOR
FG
PG
DRIVE
REEL MOTOR
FG
TENSION SENSOR
T/C IN
T/C OUT

ALL RECORDING CIRCUIT IS NOT USED IN AU-505.

Fig. 6 Overall Block Diagram

MAINTENANCE & MECHANICAL ADJUSTMENTS

This section covers the disassembly method, maintenance procedures, and mechanical adjustment procedures.

REGULAR MAINTENANCE

The MII-VTR is a complex piece of equipment. It contains many posts, rollers and heads etc. Which may wear with pro-longed use. Dust and dirt will also affect the operation of the machine. It is very important that require preventive maintenance (PM) is carried out according to the maintenance chart. This will ensure reliablility, and the machine's specification.

Preventive maintenance should also be performed after any repairs are carried out on the equipment.

Panasonic

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AU-520S/520 REGULAR MAINTENANCE

REGULAR MAINTENANCE

The purose of periodic maintenance is to preserve the function of this machine throughout its useful life. The user or service dealer should perform these maintenance procedures regularly to ensure that maximum utility is obtained from the machine.

REGULAR MAINTENANCE IS NECESSARY

The MII-VTR is a complicated piece of equipment. It contains many belts, rollers, heads etc., which become worn and deteriorate as time goes by, causing trouble. Dust and dirt will also impede the proper function of the machine. In light of this, it is very important that overall maintenance be done according to the maintenance chart to maintain the functions of the MII-VTR, and to avoid accidental problems. This maintenance should also be performed after any repairs are done on the equipment.

REGULAR MAINTENANCE IS RECOMMENDED

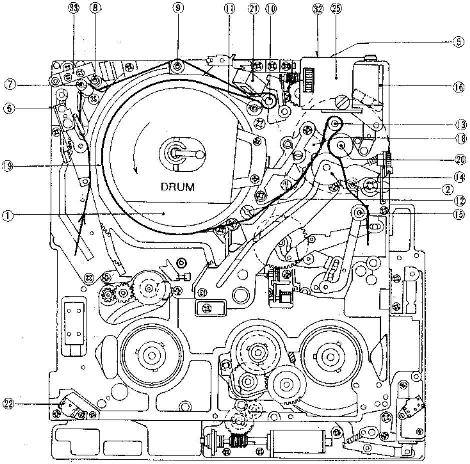
The MII-VTR used for broadcast applications requires particular attention for several reasons. The installation conditions and applications are not always the best. Long use times or poor environmental conditions may adversely affect the lifespan and performance of the machine. Regular maintenance assures that the purchaser obtains the maximum value for his expenditure.

MAINTENANCE CHART (FOR AU-520S/520)

● Replacement

Parts Name	Parts No.	Location No.	Using Hours 500	1000	1500	2000	2500	3000	3500	4000	Pcs/Unit
Upper Drum	VEH0384	①	●	●	●		●	●	●		1
Pinch Roller Arm U	VXL1554	②		●		●		●		●	1
S. Brake U	VXL1574	③				●				●	1
T. Brake Arm U	VXL1575	④				●				●	1
Loading Belt	VDV0162	⑤		●		●		●		●	1
P1 Arm U	VXL1716	⑥								●	1
P3 Roller U	VXP0936	⑦				●				●	1
P4 Roller	VDP1100	⑧								●	1
P5 Roller U	VXP0936	⑨				●				●	1
P6 Roller U	VXP0937	⑩				●				●	1
P7 Roller Post U	VXP0938	⑪				●				●	1
P8 Roller U	VXP0936	⑫				●				●	1
P9 Roller U	VXP0815	⑬				●				●	1
P10 Roller	VDP1100	⑭								●	1
P11 Roller U	VXP0937	⑮				●				●	1
Thrust Bearing	VDB0835	㉜								●	1
Pinch Solenoid U	VXA3210	⑯								●	1
Brake Solenoid	VSJ0077	⑰								●	2
A/C Head	VBR0137	⑱				●				●	1
Drum U	VEG0696	⑲				●				●	1
Capstan U	VEM0322	⑳				●				●	1
F/E Head	VBS0040	㉑				●				●	1
REC Inhibit SW	EVQWUS002	㉒								●	1
Micro Switch	VSH0031	㉓								●	1
Leaf Switch	VSH0026	㉔								●	3
Leaf Switch	VSH0034	㉔-1								●	1
Loading Motor (with Pully)	VEM0270	㉕								●	1
Tension Plate Spring	VXA2925	㉝						●			1
S. Reel U	VXR0160	㉖								●	1
T. Reel U	VXR0161	㉗								●	1
Up Down Motor	VEM0274	㉘								●	1
Small Cassite Reel U	VXR0163	㉙								●	1
T. Brake Solenoid	VSJ0077	㉚								●	1
Idler Gear U	VXP0849	㉛								●	1
Hour Meter	VSE0035	—		●		●		●		●	1
Fan Motor	VRF0034	—				●				●	1

MAINTENANCE PARTS LOCATION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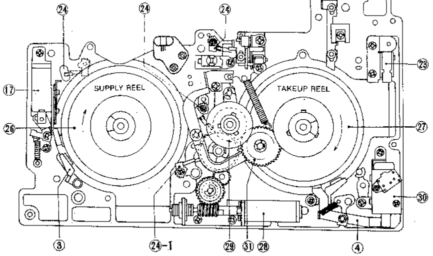
〈Main Chassis〉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⑰
SUPPLY REEL
TAKEUP REEL
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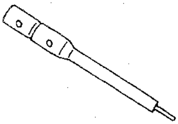
④

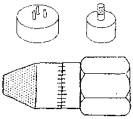
〈Sub Chassis〉

Servicing Fixtures & Tools for Model AU-520S/520

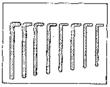
VFK0293 Post Driver



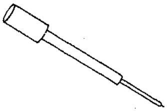
VFK0133 Dial Torque Gauge
VFK0354 Adaptor for VFK0133
VFK0134 Adaptor for VFK0133



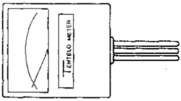
VFK0326 Hex. Wrench Set



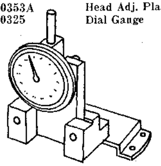
VFK0357 Eccentric Screwdriver(1.5mm)



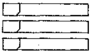
Back Tension Meter (Tentelometer)
VFK0132



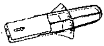
VFK0353A Head Adj. Plate
VFK0325 Dial Gauge



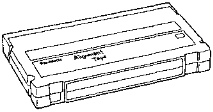
VFK27 Head Cleaning Stick



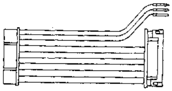
VFK66 Fan Type Tension Gauge



VFM7180EG Alignment Tape

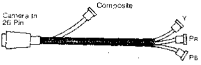


VKF0425 SYNCRO Connector



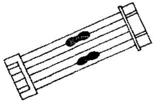
VFK0385

Component Input Cable

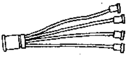


VFK0386

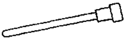
A/R Bias Current Connector



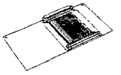
VFK0605
12Pin Component/CTCM Output Cable



VFK0692 Pinch Position (2) Pin

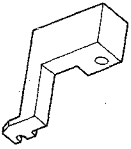


VFK0404 (supplied) Extension Board

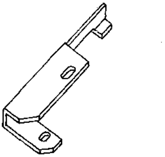


VFK0410 Hex Wrench

VFK0599A Pinch Position Adj Tool



VFK0691 Pinch Position (1) Plate



< VIDEO HEAD AND TAPE TRANSPORT CLEANING >

This procedure is divided into two categories:

1. Daily Cleaning–Once per 24 hours for studio equipment or approximately every 10 to 15 hours for field equipment or equipment used intermittently.
2. Weekly Cleaning–Every 7th day or approximately every 50–70 hours of operation. Adjust this schedule to suit the environmental conditions (dust, dirt, or field exposure).

<1> Daily Cleaning

Prior to daily use and prior to doing the weekly cleaning routine, the video heads should be cleaned by playing the cleaning cassette (Model AU–MPSCL).

Play the Head Cleaning Tape for only 15 seconds. Since the cleaning tape is slightly more abrasive than the regular Metal Particle tape, longer use on a daily basis may cause accelerated head wear, hence a decrease in useable head life. Fifteen–second cleaning will have a negligible effect on haed life.

The cleaning cassette will stop automatically at the end of the tape and can be used for up to 20 passes. Mark the label each time the cassette is rewound. Rewinding the tape in the usual manner will not harm the video heads.

<2> Weekly Cleaning

Once per week the following cleaning regimen should be performed:

(1) . Perform the 15–second daily cleaning.
(2) . Clean all tape contact surfaces, including A/C head, upper and lower drum, thoroughly with a soft cloth soaked in Freon TF.
(3) . Clean all the video heads by gently rubbing in a horizontal direction, as depicted, using a head cleaning stick (VFK27) or a lint free cloth moistened with Freon TF.

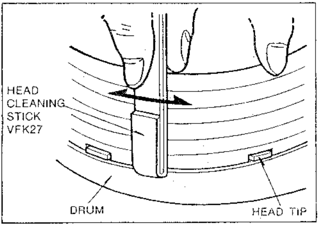


Fig. C1

(4) . Wipe all tape contact surfaces, including upper and lower drum, with a dry soft cloth to ensure that all residual moisture is removed from the tape contact surfaces.

Note:
(1) . When cleaning the upper drum, hold it secure with your finger tips.
(2) . Occasionally, dirt or debris may become lodged in the air bearing channels that are cut in the upper drum's surface. This can be removed by gently dislodging it with a sharpened toothpick.
(3) . Denatured alcohol may be used in place of Freon TF if modest amounts of solvent are used Excess alcohol will dilute and remove the bearing lubricant in the capstan motor and rotary guides.

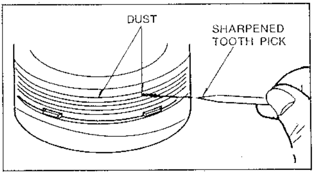


Fig. C2

* Freon TF is registered trademark of E.I, dupont de Nemours & Co.,Inc.

1. DISASSEMBLY METHOD

1–1. Cassette Cover and Top Panel Removal

(1). Turn the power switch ON and push the EJECT BUTTON.
Turn the power switch OFF.
(2). Unscrew 2 screws (A) and remove the cassette cover.
(3). Unscrew 4 screws (B) and remove the Top Panel.

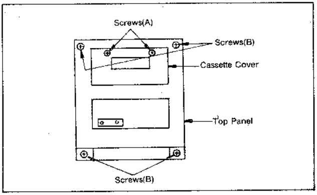


Fig. 1–1 Top View

(4). Then, you should be able to see the Mechanism Section.

1–2. Bottom Panel Removal

(1). Unscrew 6 screws (A) and remove the Bottom Panel.

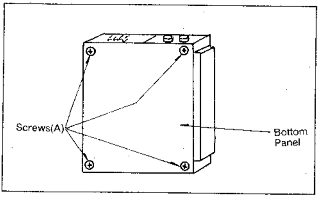

Screws(A)
Bottom Panel

Fig. 1–2–1 Bottom View

(2). Then, you can see the System Control P.C.B. and Battery Pack Cover as shown in figure 1–2–2.

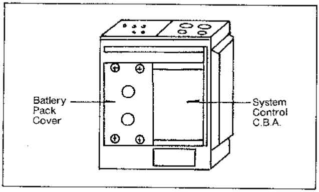

Battery Pack Cover
System Control C.B.A.

Fig. 1–2–2 System Control P.C.B. and Battery Pack Cover

1–3. Side Panel Removal

(1). Remove the Cassette Cover, Top Panel and Bottom Panel (Refer to Section 1–1 and 1–2).
(2). Unscrew 6 screws (A) and remove the Side Panel as shown in figure 1–3.

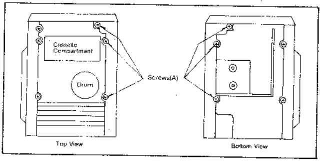

Cassette Compartment
Drum
Screws(A)
Top View
Bottom View

Fig. 1–3 Side Panel Removal

1–4. Jack Panel Removal

(1). Remove the Top Panel and Bottom Panel (Refer to Section 1–1 and 1–2).
(2). Unscrew 6 screws (A) and remove the Jack Panel as shown in figure 1–4.

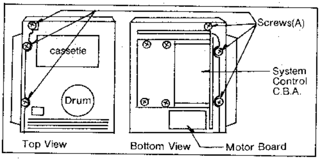

cassette
Drum
Screws(A)
System Control C.B.A.
Top View
Bottom View
Motor Board

Fig. 1–4 Jack Panel Removal

< MAJAR MECHANISM PARTS REPLACEMENT >

2–1. Replacement and Adjustment of the Drum Unit

(1) Remove the Top Panel, Cassette Cover and Bottom Panel.

(2) Unscrew 2 screw (A) on the PB Head Amp P.C.B., remove the PB Head Amp P.C.B. and disconnect a connector P351 as shown in figure 2–1–1.

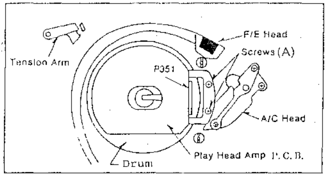

F/E Head
Screws (A)
Tension Arm
P351
A/C Head
Play Head Amp P.C.B.
Drum

Fig. 2–1–1 Play Head Amp Removal

(3) Unscrew the 4 screws (B) and remove the Battery Pack Cover as shown in figure 2–1–1.

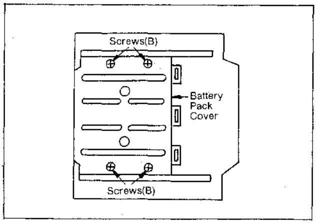

Screws(B)
Battery Pack Cover
Screws(B)

Fig. 2–1–2 Battery Pack Cover Removal

(4) Unscrew the 3 screws (C) and remove the Battery Catcher as shown in figure 2–1–2.

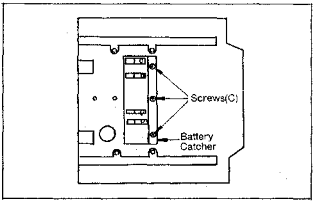

Screws(C)
Battery Catcher

Fig. 2–1–3 Battery Catcher Removal

(5) Remove the VIDEO 1 P.C.B. and disconnect 2 connectors (P371 and P372) on VIDEO 1 P.C.B.

(6) Pull out the 2 connectors (P371 and P372) to battery pack side as shown in figure 2–1–4.

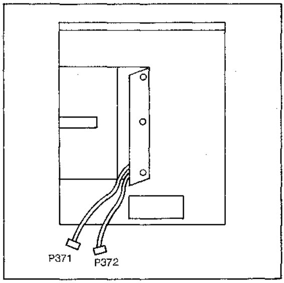


Fig. 2–1–4 Borrom View

(7) Unscrew the 3 screws (D) and remove the Drum Unit as shown in figure 2–1–5.

Note: Do not damage the Head Chip of Upper Drum, when the drum the drum unit is replaced.

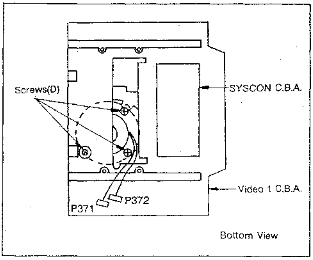

Screws(D)
SYSCON C.B.A.
Video 1 C.B.A.
P371
P372
Bottom View

Fig. 2–1–5 Drum Unit Removal

(8) Disconnect the 2 connectors (P621 and P622) on the bottom of the Drum Unit as shown in figure 2–1–6.

(9) Unscrew a screw (E) and remove the Dew sensor as shown in figure 2–6–1.

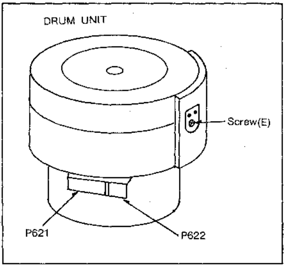

DRUM UNIT
Screw(E)
P621
P622

Fig. 2-1-6

(10) Install the new Drum Unit.
(11) Reverse the previous steps.
(12) After the replacement of the Drum Unit, play back the cleaning cassette (AU-MPSCL) for 60 seconds.
(13) After the replacement, confirm the Tape interchangeability.

2-2. Replacement of the Post Rollers (P3, P5, P6, P7, P8, P9, P11)

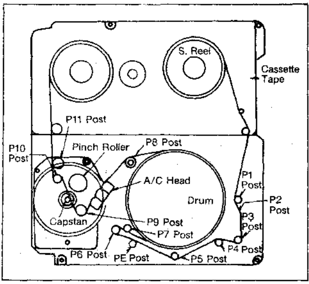

S. Reel
Cassette Tape
P11 Post
P10 Post
Pinch Roller
P8 Post
A/C Head
Drum
P1 Post
P2 Post
P3 Post
Capstan
P9 Post
P7 Post
P4 Post
P6 Post
PE Post
P5 Post

Fig. 2-2-1 Location of Each Post

Important : When replacing the plural of the Post Rollers, do not replace the Post Rollers at the same time.
After replacing of every Post Roller, adjust and confirm the tape interchangeability.

(1). Remove the Cassette Cover, Top Panel and remove the Cassette Compartment.
(2). Unscrew the upper flange and remove the separate parts on the post as shown in figure 2-2-2.

Note:
When removing the Roller Post, don't unscrew the hex screw.

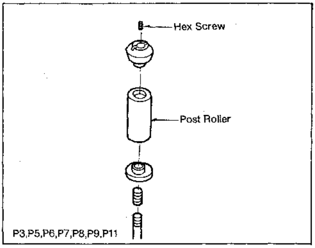

Hex Screw
Post Roller
P3,P5,P6,P7,P8,P9,P11

Fig. 2-2-2 Roller Post

(3). Take off the Post Roller and install the new Bearing as shown in figure 2-2-2.
(4). Install the new upper flange, (don't touch the hex screw.)
(5). After replacement, tape interchangeability adjustment and cleaning are required.

Note:
The replacement method of all posts is the same.

2-3. Replacement of the P4 Roller Post

(1). Remove the Cassette Cover and Top Panel.
(2). Remove the washer (A) and remove the P4 Arm Unit as shown in figure 2-3.

Note:
Be careful not to lose the 2 washers when removing the P4 Arm Unit.

(3). Remove the E-ring (B) and remove the P4 Roller Post as shown in figure 2-3.

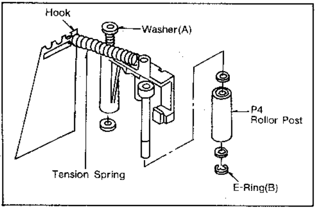


Fig. 2-3 P4 Roller Post

(4). Install the new P4 Roller Post and attach the new washer.
(5). Reverse the previous steps.
(6). After replacement, tape linearity adjustment and cleaning are required.

2-4. Replacement of the P1 Arm Unit

(1). Remove the Cassette Cover and Top Panel.
(2). Remove the washer (A) and remove the P1 Arm Unit as shown in figure 2-4-1.

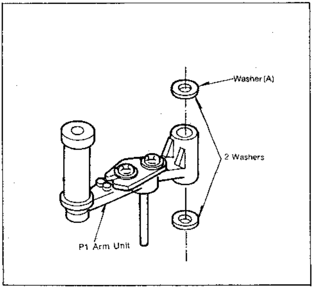


Fig. 2-4-1 P1 Arm Unit

Note:
Be careful not to lose the 2 washers when removing the P1 Arm Unit as shown in figure 2-4-1.

(3). Install the new P1 Arm Unit and attach the new washer.
(4). After replacement, tape interchangeability and the following adjustments listed in figure 2-4-2 are required.

	CONTENTS	SECTION	ITEM
1	Tension (1) Confirmation and Adjustment	Elec.—Adj.	3-3
2	Tension (2) Confirmation and Adjustment	Elec.—Adj.	3-4
3	Tension (3) Confirmation and Adjustment	Elec.—Adj.	3-5
4	Tension Confirmation	Elec.—Adj.	3-6

Fig. 2-4-2 Tape Interchangeability adjustment

2-5. Tape Interchangeability Adjustment General Instructions

Objectives of this adjustment are as follows:

(1) Tape travels smoothly through the entire tape path and no tape damage should occur in any mode.

(2) Good tape interchangeability can be obtained so that a recorded tape can be played back among units.

<First Step>
Play back a blank or pre-recorded tape and observe the tape path.
Pay attention to the flanges of all posts and make sure that tape curling or overriding over the flanges does not exit.
Use the mirror light for this purpose.

<Second Step>
Then use the reference tape and observe the RF envelope by using the oscilloscope.
If there is lack of envelope especially around the head switching positions, then adjustments are needed.

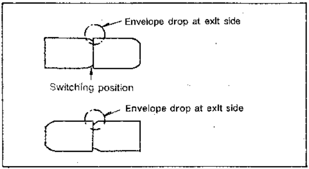


Fig. 2-5-1 Envelope Output

Examples:

Sequence of Adjustments
recommended sequence of adjustments is shown in the following chart.

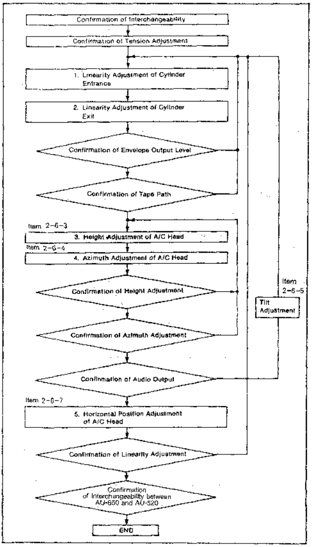

Confirmation of Interchangeability
Confirmation of Tension Adjustment
1. Linearity Adjustment of Cylinder Entrance
2. Linearity Adjustment of Cylinder Exit
Confirmation of Envelope Output Level
Confirmation of Tape Path
Item 2-6-3
3. Height Adjustment of A/C Head
Item 2-6-4
4. Azimuth Adjustment of A/C Head
Confirmation of Height Adjustment
Item 2-6-5
Tilt Adjustment
Confirmation of Azimuth Adjustment
Confirmation of Audio Output
Item 2-6-7
5. Horizontal Position Adjustment of A/C Head
Confirmation of Linearity Adjustment
Confirmation of Interchangeability between AU-650 and AU-520
END

Fig. 2-5-2 Interchangeability Flow Chart

Locations of Posts and Summary of Adjustments.
Locations of posts and Summary of Adjustments are shown in figures 2-5-3 and 2-5-4.

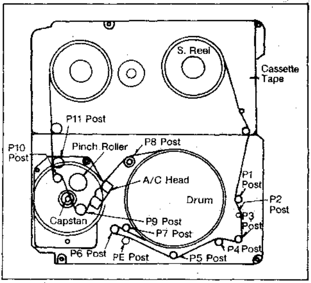

S. Reel
Cassette Tape
P11 Post
P10 Post
Pinch Roller
P8 Post
A/C Head
Drum
P1 Post
P2 Post
P3 Post
Capstan
P9 Post
P7 Post
P4 Post
P6 Post
PE Post
P5 Post

Fig. 2-5-3 Location of Each Post

Name of Post	Height Adjustment	Tilt Adjustment	Tape Path Limit	Note
P1	—	—	Free	
P2	—	—	—	
P3	○*	—	Lower Limit	* Factory Set
P4	—	—	—	
P5	○	—	Lower Limit	
P6	○	○⋆	Upper Limit	⋆ Factory Set
P7	○	—	Upper Limit	
P8	○	—	Upper Limit	
P9	○	○*	Lower Limit	* Factory Set
P10	—	—	—	
P11	○*	—	Lower Limit	* Factory Set

Fig. 2-5-4 Tape Path Limit Chart

<P1 Post Position Confirmation/Adjustment>

This is factory adjustment only Please do not adjust this post unless it is replaced.
In case this post is replaced, following confirmations and adjustments are needed.

(1) Insert a work cassette and place the unit in the PLAYBACK mode.
(2) Observe both P2 and P1 ridgeline (a – a) where tape contacts from the direction (C) (Apply light for easier observation).
Make sure that both ridgelines of the posts are in the same inclination (angle). This makes smooth tape travel at the posts.
(3) If it is not, slightly loosen the screw (A) and insert a flat screwdriver into the slot (B).
Adjust the P1 position so that it meets above requirement.

(4) After P1 post adjustment, observe both P2 and P3 ridgelines from the direction (D).
Confirm that both ridgelines of the posts are in the same inclination (angle).

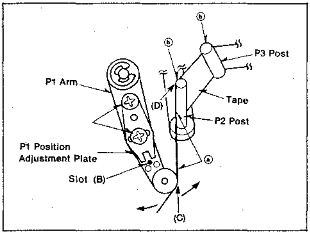


Fig. 2–5–5 P1 Post Position

<1> Entrance Linearity Adjustment

- * Tools Required
  Post Driver (VFK0293)
  Extension Board (VFK0404)
  Alignment Tape

(1) Extend the Video 1 P.C.B.
(2) Connect the scope CH1 to TP17 on the Video 1 P.C.B. and CH2 to TP18 (Trigger) on the Video 1 P.C.B.
(3) Play back the tape linearity adjustment segment of alignment.
(4) Adjust Tracking Control VR so that the envelope level *is half* (50%) of the *maximum* level.
(5) Set both P2 and P7 limits as follows:
< P7 Post>
Put the post driver onto the P7 post. Then turn the P7 post in clockwise or counterclockwise so that the upper and lower flanges of the P7 postdo not touch to the edges of the tape. (Don't tighten the hex screw)

<P6 Post>
Put the post driver onto the P6 post and slightly loosen the hex screw first. Then turn the P6 post in clockwise so that the lower edge of the tape just touches the cylinder tape guide.
Slightly tighten the hex screw Confirming the envelope is as shown in figure 2–5–6.

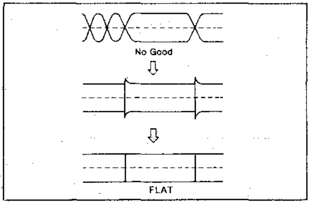


Fig. 2–5–6, 7 Envelope Output of Entrance

<P7 Post>
Turn the P7 post in clockwise so that the upper flange of the P7 post just touches to the top edge of the tape.
Confirm the envelope wave is flat as shown in figure 2–5–7.
Tighten the hex screw.

<2> Exit Linearity Adjustment

- * Tools Required
  Post Driver (VFK0293)
  Post Driver (VFK0329)
  Hex Wrench (VFK0410)
  Alignment Tape

(1) The setting of oscilloscope setting is the same as the entrance linearity adjustment.
Play back the linearity adjustment segment of the alignment tape.
(2) Set both P8 and P9 limits as follows:

<P8 Post>
Turn the P8 post in clockwise so that the upper flange of the P8 post just touches to the top edge of the tape.
Confirm the envelope is flat as shown in figure 2–5–8.

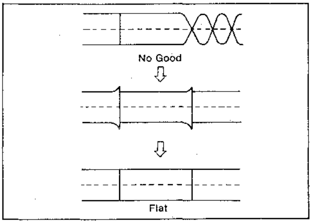


Fig. 2–5–8 Envelope Output Exit

Note:
If the envelope is not flat after adjust the P8 post, *turn the hex screw* (A) *on the A/C Head in* clockwise so that the envelope becomes flat.

<P9 Post>
Confirm that the P9 post is set to lower If it is not, turn the P9 post in counterclockwise so that the lower flange of the P9 post just touches to the bottom edge of the tape. After this adjustmen confirm that th anvelope is flat as shown in figure 2–5–8.

<Confirmation of the P9 post inclination>
Place the unit in the PLAYBACK mode and turn the P8 post in counterclockwise so that touches free of the tape, then turn the hex screw (B) in counterclockwise unit tape path becomes normal as shown in figure 2–5–9.
Then adjust the P8 post so that the RF emvelope becomes flat.

If the waveform (A) can not obtaianwith P9 post, slightly tilt the A/C head to tape side.
After adjustment is completed, confirm that the tape damage or curling does not occur.
Turn the Tracking VR to clockwise and counterclockwise and confirm that the RF level is always flat.

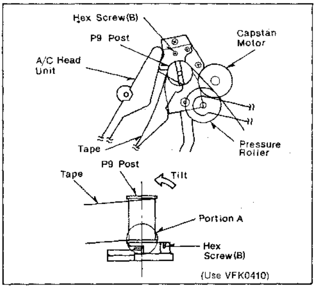

Hex Screw(B)
P9 Post
Capstan Motor
A/C Head Unit
Tape
Pressure Roller
P9 Post
Tape
Tilt
Portion A
Hex Screw(B)
(Use VFK0410)

Fig. 2–5–9 P9 Post Inclination

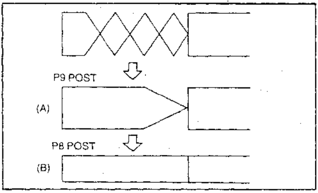

P9 POST
(A)
P8 POST
(B)

Fig. 2–5–10 Envelope Output Exit

Note:
After this adjustment, place the unit in the EJECT mode.
Then, place the unit in the PLAYBACK mode again and reconfirm the tape path as described before.

<3> Envelope Output Confirmation

(1) After linearity adjustment, place the unit in the EJECT mode.

(2) Connect the scope CH1 to TP11 (Y CH) on the VIDEO 1 P.C.B. and CH2 to TP14 (C CH) on the VIDEO 1 P.C.B. and use Pin 43 of P1 (EXTENSION BOARD VFK0404) to externally trigger the scope.

(3) Insert the alignment tape and play back a sinewave (Linearity) portion.

(4) Adjust the Tracking Control so that the envelope level is maximum.

(5) Confirm the envelope output is as shown in figure 2–5–11.

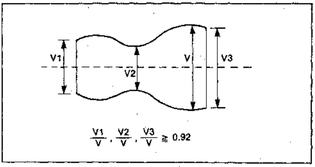

V1
V2
V
V3
$\frac{V1}{V}, \frac{V2}{V}, \frac{V3}{V} \geq 0.92$

Fig. 2–5–11 Envelope Output Confirmation

2–6–1. Replacement and Adjustment of the A/C Head Unit

(1) Remove the Cassette Cover and Top Panel.
(2) Unscrew the 2 screws (A) and remove the A/C Head Unit as shown in figure 2–6–1.

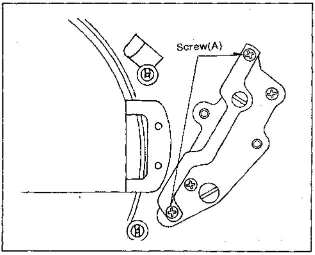


Fig. 2–6–1 A/C Head

(3) Unsolder the 18 wires on the A/C Head Unit as shown in figure 2-6-2, and remove the A/C Head.
(4) Solder the 18 ires at the new A/C Head as follows.

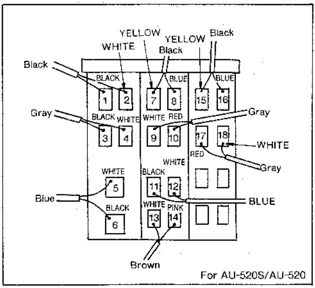

YELLOW
WHITE
YELLOW
Black
Black
Black
BLACK
BLUE
BLUE
1
2
7
8
15
16
Gray
BLACK
WHITE
WHITE
RED
Gray
3
4
9
10
17
18
WHITE
RED
WHITE
Gray
WHITE
BLACK
5
11
12
Blue
BLUE
BLACK
WHITE
PINK
6
13
14
Brown
For AU-520S/AU-520

Fig. 2-6-2 A/C Head Connection

(5) Install the new A/C Head and shield plate, reverse the previous steps.
(6) After replacement is completed, the following adjustments are required to assure tape interchangeability.

2-6-2. A/C Head Adjustment

RECOMMENDATION:
When adjust the A/C Head adjustment, please observe the YRF envelope (at TP17 on the VIDEO 1 P.C.B.) simultaneously.
Trigger the scope by TP18 on VIDEO 1 P.C.B.

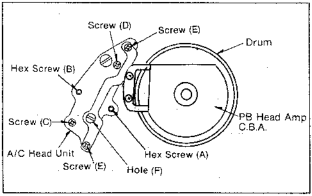

Screw (D)
Screw (E)
Drum
Hex Screw (B)
Screw (C)
PB Head Amp C.B.A.
A/C Head Unit
Hex Screw (A)
Screw (E)
Hole (F)

Fig. 2-6-3 A/C Head Adjustment

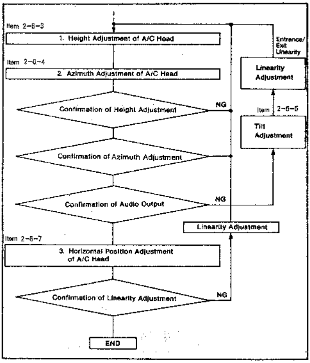

Item 2-6-3
1. Height Adjustment of A/C Head
Item 2-6-4
2. Azimuth Adjustment of A/C Head
Confirmation of Height Adjustment
NG
Confirmation of Azimuth Adjustment
Confirmation of Audio Output
NG
Entrance/ Exit Linearity
Linearity Adjustment
Item 2-6-6
Tilt Adjustment
Linearity Adjustment
Item 2-6-7
3. Horizontal Position Adjustment of A/C Head
Confirmation of Linearity Adjustment
NG
END

Fig. 2-6-4 A/C Head Adjustment Flowchart

2-6-3. A/C Head Height Adjustment

* Tool Required
Alignment Tape
Hex Wrench

(1) Play back the alignment tape 3KHz Audio portion.
(2) Connect the scope CH1 to TP7 (CH1 Audio) and CH2 to TP8 (CH2 Audio) on the AUDIO MAIN P.C.B.
(3) Touch thte tape on the A/C Head lightly and move the tape up and down by finger as shown in figure 2-6-5.

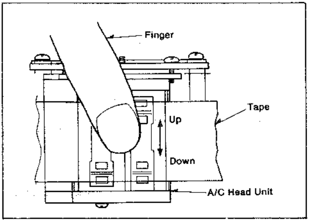

Finger
Tape
Up
Down
A/C Head Unit

Fig. 2-6-5 A/C Head Height Confirmation

(4) When the tape is moved to up or down, the audio level will be increased or decreased.
In this case, adjust the A/C Head Height as shown in figure 2-6-6.

Note:
When adjust the A/C Head Height, turn the screws (A), (B), (C), and (D) in the same amount [screw (C) and (D) are in the reverse direction against screws (A) and (B)] so that the output level becomes maximum.

TAPE MOVEMENT	AUDIO LEVEL	A/C HEAD HEIGHT ADJUSTMENT	HEX SCREW		SCREW	
			A	B	C	D
DOUN ⇩	INCREASED ↗	UP ⇧	CCW	CCW	CW	CW
	DECREASED ↘	See the following item A	——		——	
UP ⇧	INCREASED ↗	DOWN ⇩	CW	CW	CCW	CCW
	DECREASED ↘	See the following item A	——		——	

CCW=Counter clockwise
CW =Clockwise

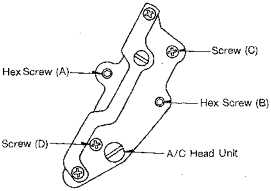


Fig. 2-6-6 A/C Head Height

A = When the audio level is decreased at each tape movement, the A/C Head Height Adjustment is good.

(5) Then touch the tape on the A/C Head lightly and move the tape up and down by finger and confirm tha toutput level is maximum as shown in figure 2-6-7.

(6) If it is not maximum level, repeat its adjustment.

Note:
After this adjustment, the azimuth adjustment of A/C Head and RF envelope output confirmation are required.

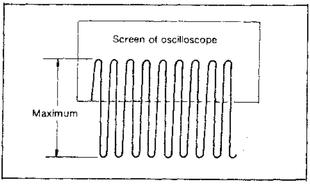


Fig. 2-6-7 Waveform Position

2-6-4. A/C Head Azimuth Adjustment

* Tool Required
Alignment Tape

(1) Insert the alignment tape and play back the 15KHz portion.
(2) Connect the scope CH1 to TP7 (Audio CH1) and CH2 to TP8 (Audio CH2) on the AUDIO P.C.B.
(3) Confirm that the both waveforms are in same phase.
(4) If it is not, slightly loosen the screws (D) and adjust the screw (C) so that the both waveforms have the same phase and maximum amplitude at CH1 output.
(5) Tighten the screw (D) and confirm that the waveforms have the same phase. If it is not same phase, repeat step 4.
(6) Then touch the tape on the A/C Head lightly (Refer to figure 2-6-9) and move the tape up and down by finger and confirm that the output level is not more than maximum.
If it is not, repeat its adjustment.

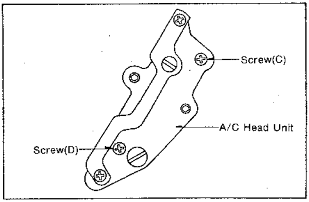


Fig. 2-6-8 Azimuth Adjustment

Note:
After this adjustment, confirm the Height Adjustment of A/C Head, Envelope Output of Video signal and specification of azimuth.

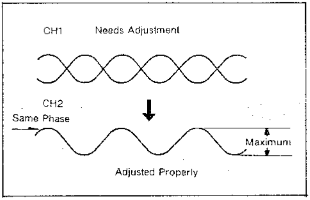


Fig. 2-6-9 Azimuth of A/C Head

2-6-5. Tilt Adjustment of A/C Head

* Tools Required
Alignment Tape

(1) Insert the alignment tape and play back the Audio 3KHz portion.
(2) Connect the scope CH1 to TP7 (Audio CH1) and CH2 to TP8 (Audio CH2) on the AUDIO P.C.B.
(3) Then, touch the tape on the A/C Head softy (Refer to figure 2-6-5) and confirm that the audio level is not more than maximum.
(4) If it is not, confirm the following items <1>, <2> and <3>.

<1> Touch the A/C Head softly and move the tape up and down by finger pressure.
If the output level of audio increase more than maximum readjust the height adjustment.

<2> When touching the A/C Head as above, if the output level of audio increase more than maximum, adjust the tilt adjustment as shown below.
Turn the hex screw (A) counterclockwise or screw (B) clockwise as shown in figure 2-6-10.

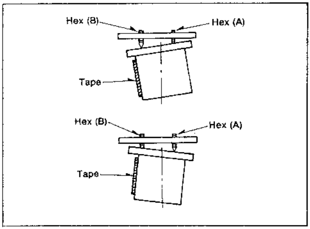


Fig. 2-6-10 A/C Head Tilt

<3> Insert the alignment tape and play back the tape.
Connect the scope to TP2 (SERVO P.C.B.) and confirm that the CTL pulse is V1 > 1.0 (Vp-p) and V2 > 1.0 (Vp-p) as shown below.
Connect the scope CH1 to TP8 and CH2 to TP2 (SERVO P.C.B.).
Confirm that the phase of TP8 and TP2 is locked as shown below.

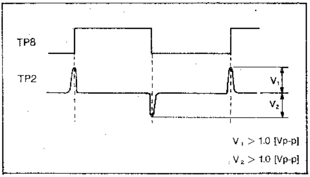


Fig. 2-6-11 Confirmation of CTL Pulse

If the CTL output is not proper pulse, recheck the adjustment from Section 2-6-5 Step 1.

Note:
After this adjustment, readjust from Linearity Adjustment.
Basically, the surface of A/C Head should be vertical to the chassis.

2-6-6. Tracking Fix Adjustment

* Tools Required
Alignment Tape
Extension Board (VFK0404)

(1) Insert the alignment tape and play back the color bar portion.
(2) Connect the scope to TP11 (VIDEO 1 P.C.B.) and use TP3 (PB HEAD AMP C.B.A.) as the trigger.
(3) Set the tracking control VR to its centre and adjust VR2 (Servo P.C.B>) so that the output of Y CH1 becomes maximum as shwon in figure 2-6-12.

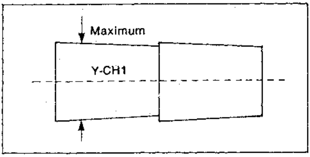


Fig. 2-6-12 Tracking Fix Adjustment

2-6-7. A/C Head Horizontal Position Adjustment

* Tools Required
Eccentric Screwdriver
Alignment tape
Extension Board (VFK0404)

Note:
Before this adjustment, linearity adjustment, height, tilt and azimuth adjustment of A/C Head and tracking fix adjustment on the Servo P.C.B. should have been completed.

(1) Insert the alignment tape and play back the linearity portion.
(2) Connect the scope CH1 to TP17 (Y RF)(VIDEO 1 P.C.B.), CH3 to TP18 (Trigger)(VIDEO 1 P.C.B.) and CH2 to TP8 (AUDIO CH2) on the Audio Main P.C.B.
(3) Slightly loosen the 2 screws (E) and insert the eccentric screwdriver into the hole (F).
(4) Adjust the A/C Head unit by turning the eccentric screwdriver so that the envelope output is maximum as shown figure 2-6-13.
(5) Tighten the 2 screws (E).
(6) After tighten the 2 screws (E), reconfirm the RF Envelope Output is maximum by turning the tracking control VR.

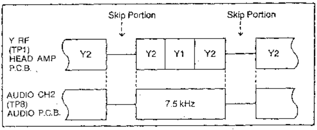


Fig. 2-6-13 RF Envelope Output

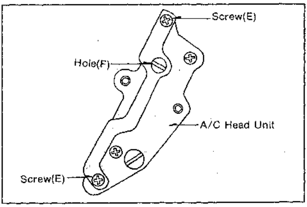


Fig. 2-6-14 Horizontal Position Adjustment

3. Replacement of the Full Erase Head

(1) Remove the Cassette Cover and Top Panel. (refer to Disassembly Mothod item 1-1)
(2) Unsolder the 2 wires (A) on the FE head as shwon in figure 3-1.

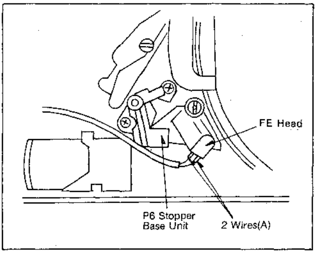

FE Head
P6 Stopper Base Unit
2 Wires(A)

Fig. 3-1 P6 Stopper Base Unit

(3) Remove the E-ring (B).
(4) Unscrew the screw (C) on the back side of the PE Post and remove the PE Post as shown in figure 3-2.

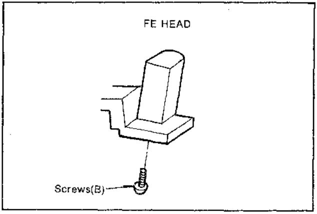

FE HEAD
Screws(B)

Fig. 3-2 Full Erase Head

(5) Install the new full erase head (PE POST) to the P6 stopper base unit and install in the original position.
(6) Solder the 2 wires to full erase head.

4. Replacement of the Capstan motor

(1) Open the Main Chassis. (Refer to the Section 12.)
(2) Unscrew the 3 screws (A) and remove the Capstan Motor Cover as shown in figure 4-1.

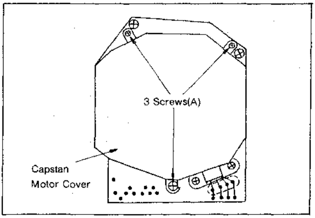

3 Screws(A)
Capstan
Motor Cover

Fig. 4-1 Capstan Motor Cover Removal

(3) Disconnect 2 connectors P503 and P504 on the Servo P.C.B.
(4) Unscrew the emergency eject screw and poen the Belt cover, then unscrew the 2 screws (D) and remove the P9 stopper unit as shown in figure 4-2.

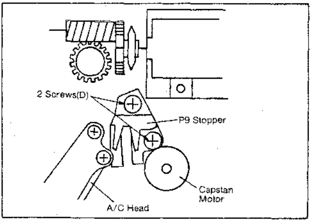

2 Screws(D)
P9 Stopper
Capstan
Motor
A/C Head

Fig. 4-2 P9 Stopper unit

(5) Unscrew the 2 screws (C) and remove the Capstan Motor Unit as shown in figure 4-3.

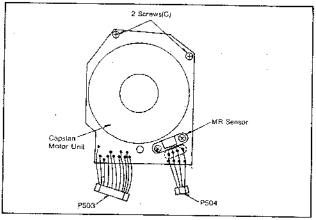

2 Screws(C)
MR Sensor
Capstan Motor Unit
P503
P504

Fig. 4–3 Capstan Motor Unit

(6) Install the new Capstan Motor Unit.
(7) Reverse the previous steps for reassembly.

5. Replacement of the Pinch Roller Arm

(1) Remove the Cassette Cover and Top Panel.
(2) Remove the E–ring (A) and remove the Pinch Roller Arm from the Pinch Roller Roller Arm Lever by hand.

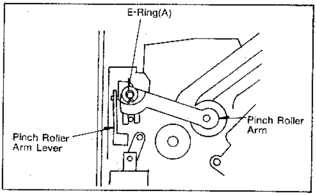

E-Ring(A)
Pinch Roller Arm Lever
Pinch Roller Arm

Fig. 5 Pinch Arm

(3) Install the new Pinch Roller Arm to the Pinch Roller Arm Lever.
(4) Reverse the previous steps.

6. Replacement and Adjustment of the Pinch Roller Solenoid

6–1. Replacement

(1) Remove the Cassette Cover and Top Panel.
(2) Unscrew the 3 screws (C) and remove the Loading Motor Unit as shown in figure 7–1.
(3) Remove the E–ring (D).
(4) Unscrew the 2 screws (E) and remove the pinch solenoid base unit as shown in figure 7–1.
(5) Unsolder the 3 wires (B) from the Mech Intermediate P.C.B. and unscrew 2 screws (C) and remove the Connection P.C.B. as shown in figure 6–2.

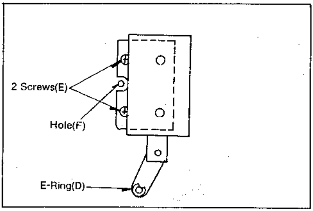

2 Screws(E)
Hole(F)
E-Ring(D)

Fig. 6–1 Pinch Roller Solenoid

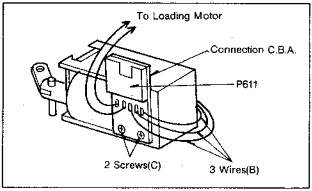

To Loading Motor
Connection C.B.A.
P611
2 Screws(C)
3 Wires(B)

Fig. 6–2 Pinch Solenoid

(6) Install the new Pinch roller Solenoid and reverse the previous steps.
(7) After replacement, Adjust the Pinch Solenoid Position.

6-2. Adjustment

* Tools Required:
Pinch Position ADJ TOOL (VFK0599A)
Pinch Position (1) Plate (VFK0691)
Pinch Position (2) Pin (VFK0692)

1. Place the unit in the loading completion mode.
2. Remove the loading motor (Refer to 7-1).
3. Remove the emargency eject wire (B) from the emargency eject wire pully as shown in Figure 7-1 after removing the loading motor.
4. Remove 2 screws (C) and connection P.C.Board on the Pinch Roller solenoid as shwon in Figure 6-2.
5. Slightly loosen 2 screws (E) as shwon in Figure 6-1.
6. Install the pinch position (1) plate (VFK0691) on the pinch solenoid and fix the plate (VFK0691) by the pinch position (2) pin (VFK0692) as shown in Figure 6-3.
   Then tighten 2 screws (C) while pusing pinch position (1) plate (VFK0691) to pinch roller side by finger.
   Be sure, solenoid is pulling fully while this step.

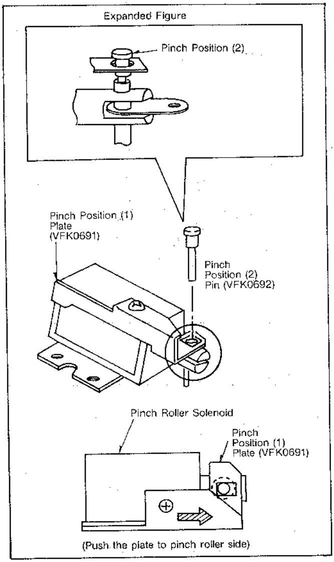

Expanded Figure
Pinch Position (2)
Pinch Position (1)
Plate
(VFK0691)
Pinch
Position (2)
Pin (VFK0692)
Pinch Roller Solenoid
Pinch
Position (1)
Plate (VFK0691)
(Push the plate to pinch roller side)

Fig. 6-3 Pinch Roller Solenoid (3)

7. Move the solenoid by Eccentric driver until the pinch roller just touches to capstan shaft (It makes pinch roller "on" condition) and instantaneously tighten 2 screws (E).
8. Confirm that the capstan motor is easily turned by rotation of the pinch roller using finger.
   However, if it is not performed, repeat the steps from 4 to 7 in Item 6-2 again.
9. After confirmation, reinstall the loading motor unit in the reverse order.
10. Place the unit in the loading completion mode.
11. Remove the E-ring (A) on the Pinch Arm Unit as shwon in Figure 6-3.

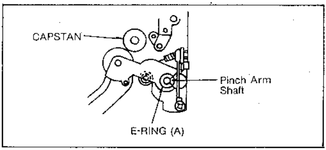

CAPSTAN
Pinch Arm
Shaft
E-RING (A)

Fig. 6-4 Pinch Arm Unit

12. Insert the Pinch Position Adj. Tool th Pinch Arm Shaft and confirm that the Pinch Position Adj. Tool touches Pin (H).
13. Press the solenoid core by finger to make a pinch roller "ON" mode (Pinch roller must touch to capstan shaft).

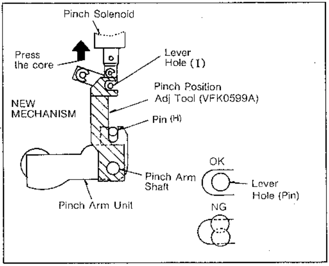

Pinch Solenoid
Press
the core
Lever
Hole (I)
Pinch Position
Adj Tool (VFK0599A)
NEW
MECHANISM
Pin (H)
OK
Pinch Arm
Shaft
Lever
Hole (Pin)
Pinch Arm Unit
NG

Fig. 6-5 Pinch Solenoid Position

14. Confirm that the Lever Hole (I) is placed to centre of U shape of Pinch Position Adj. Tools as shown in Figure 6-5.
15. If it is not, repeat the adjustment from its beginning again.

6–3. Pinch Solenoid Pressure Confirmation

* Tools Required
Fan Type Gauge (VFK66)

1. Insert a work cassette and place the unit in the PLAY mode.
2. Insert a fan tyupe tension gauge into pinch roller arm (portion A) and press it to "B" direction.
3. Confirm the tension gauge indicate the specification 1650g (+/− 200g) when the pinch roller stopped.
4. If it is out of specification, reconfirm the pinch solenoid position.

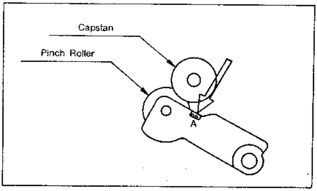


Fig. 6–3 Pinch Roller Pressure

7. Replacement of the Loading Belt

(1) Remove the Cassette Cover and Top Panel.
(2) Unscrew the Lock Screw (A) of the Belt Cover and open the Belt Cover and remove the Emergency Eject Wire (B) as shown in figure 7–1.
(3) Unscrew the 3 screws (C) and remove the Loading Motor Unit as shown in figure 7–1.

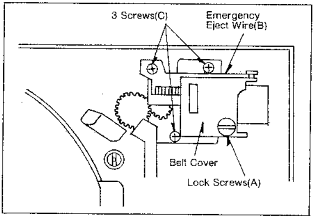


Fig. 7–1 Loading Motor Unit

(4) Remove the Loading Belt between Loading Motor and Worm Gear as shown in figure 7–2.

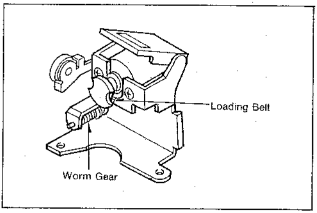


Fig. 7–2 Loading Belt

(5) Install the new Loading Belt to the Worm Gear and attach the belt to the Loading Motor.
(6) Reverse the previous steps.

8. Replacement of the Loading Motor

(1) Remove the Cassette Cover and Top panel.
(2) Unscrew the Lock Screw (A) of the Belt Cover and open the Belt Cover and remove the Emargency Eject Wire as shown in figure 7–1.
(3) Unscrew the 3 screws (C) and remove the Loading Motor Unit as shown in figure 7–1.
(4) Remove the Loading Belt as shown in figure 7–2.
(5) Unsolder the 2 wires on the Loading Motor.

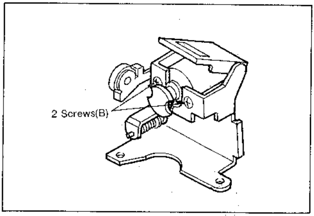


Fig. 8 Loading Motor

(6) Unscrew the 2 screws (B) on the Motor Base and remove the Loading Motor as shown in figure 8.
(7) Install the new Loading Motor.
(8) Solder the 2 wires and reverse the previous steps.

9. Replacement of the Thrust Bearing

(1) Remove the Cassette Cover and Top Panel.
(2) Unscrew the Lock Screw (A) of the Belt Cover and open the Belt Cover and remove the Emargency Eject Wire as shown in figure 7-1.
(3) Unscrew the 3 screws (C) and remove the Loading Motor Unit as shown in figure 7-1.
(4) Remove the E-ring (B) from the Belt Cover and remove the Thrust Bearing as shown in figure 9.

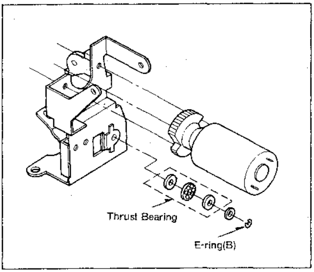


Fig. 9 Thrust Bearing

(5) Insert the new Thrust Bearing to the Belt Cover and reverse the previous steps.

10. Replacement of the Small Reel UP/Down motor Thrust Bearing

(1) Remove the Up Down Motor Unit. (refer to Replacement of the Up Down Motor Unit Section 17)
(2) Unscrew the 2 screws (A) and remove the Up Down Motor as shown in figure 10.
(3) Remove the E-ring (B) and remove the 2 Thrust Bearings as shown in figure 10.

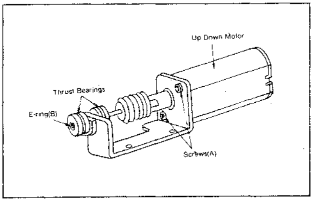


Fig. 10 Thrust Bearing Removal

(4) Install the new Thrust Bearing and reverse the previous steps.

11. Replacement of the Cassette Large and Small Detect SW (Micro SW)

(1) Unscrew the 2 screws (B) and remove the Cassette Large and Small Detect SW as shown in figure 11-1.

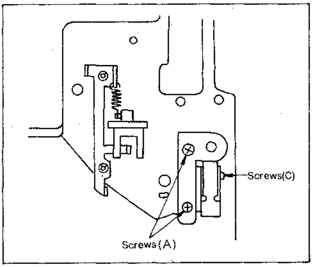


Fig. 11-1 Micro SWs Removal

(2) Unscrew the screw (C) and remove the Cassette Large and Small Detect SW (Micro SW) as shown in figure 11-1.
(3) Unsolder the 2 wires of the micro switch.
(4) Install the new Cassette Large and Small Detect SW and reverse the previous steps.

12. MAIN and SUB CHASSIS REMOVAL

Note :
When the main chassis and sub chassis removal are needed, refer to this Section.

(1) Remove the Cassette Cover, Top Panel, Side Panel and Jack Panel (Refer to Desassembly method Section 1)
(2) Unscrew 4 screws (A) and disconnect the 2 connectors P605 and P610 on the sub chassis as shown in figure 12-1-1.

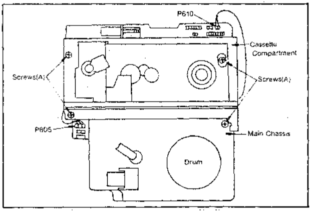

P610
Cassette Compartment
Screws(A)
Screws(A)
P605
Main Chassis
Drum

Fig. 12-1-1 Cassette Up Removal

(3) Remove the cassette conpartment.
(4) disconnect the 7 connectors (P601, P602, P603, P604, P606, P609 and P611 which is on the pinch roller solenoid P.C.B.) as shown in figure 12-1-2.

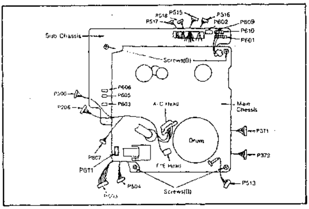

P518
P515
P516
P517
P602
P609
P610
P601
Sub Chassis
Screws(B)
P606
P605
P603
P506
P206
A-C Head
Main Chassis
P371
Drum
P372
P607
P611
F/E Head
P504
Screws(B)
P513

Fig. 12-1-2 Main Chassis Removal

(5) Remove the 2 screws (C) on the Full E-E/E-E Select switch as shwon in figure 12-1-3.

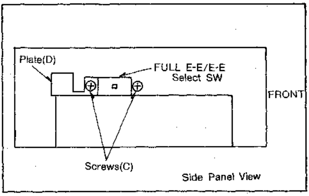

Plate(D)
FULL E-E/E-E Select SW
FRONT
Screws(C)
Side Panel View

Fig. 12-1-3 Full E-E/E-E Select Switch

(6) Remove the plate (D) as shown in figure 12-1-3.
(7) Disconnect the connector P513 on the Servo Board to keep a enough cable length between Servo Board and Main Chassis.
(8) Remove the 3 screws (E) and open the Front Panel.

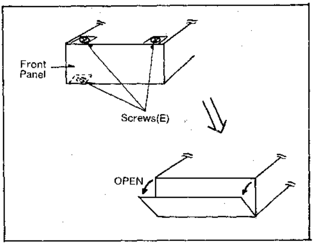

Front Panel
Screws(E)
OPEN

Fig. 12-1-4 Front Panel Removed

(9) Disconnect the 3 connectors (P206, P207 and P208) on the Audio Main P.C.B. as shown in figure 12-1-5.

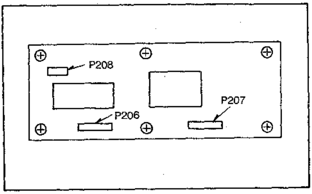

P208
P207
P206

Fig. 12-1-5 Audio Main P.C.B.

(10) After remove the 3 connectors, insert them to portion A for a enogh cable length to open the Main Chassis.

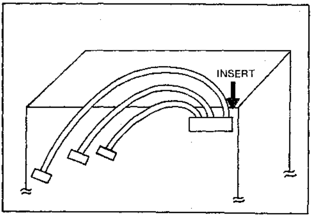


Fig. 12-1-6 A/C Head Cable

(11) Reinstall the Front Panel Temporary.
(12) Unscrew 4 screws (B) as shown in figure 12-1-2.
(13) Open the Main Chassis.
(14) Unscrew the 7 screws (F) and Remove the Sub Chassis as shown in figure 12-1-7.

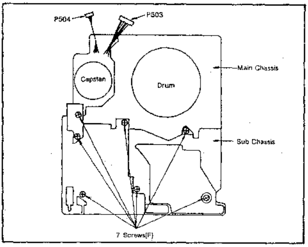

P504
P503
Capstan
Drum
Main Chassis
Sub Chassis
7 Screws(F)

Fig. 12-1-7 Sub Chassis Removal

13. Replacement and Adjustment of the Emergency Eject Detect Switch

13-1. Replacement

(1) Open the Main Chassis (refer to Section 12.)
(2) Unsolder the wire (A) at the Mechanical Intermediate 1. P.C.B. as shown in figure

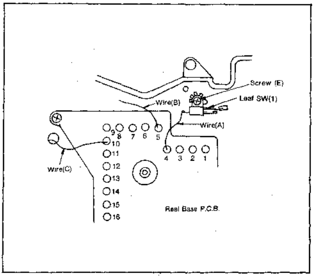

Screw (E)
Leaf SW(1)
Wire(B)
Wire(A)
Wire(C)
9
8
7
6
5
10
11
12
13
14
15
16
4
3
2
1
Reel Base P.C.B.

Fig. 13-1 Wire Soldering

(3) Unscrew the screw (E) and remove the Emergency Eject Detection Switch <Leaf Switch (1)>.
(4) Install the new Leaf switch and revers the previous steps.
(5) After replacement, adjust the Leaf Switch position.

13-2. Adjustment

* Tools Required
Eccentric Screwdriver (VFK0357)

(1) Remove the Top Panel and Main Chassis from the frame (Refer to Disassembly Method Section 1 and 12.)
(2) Unscrew the screw (A) and open the loading motor cover to operate the emergency eject as shown in figure 13-2.

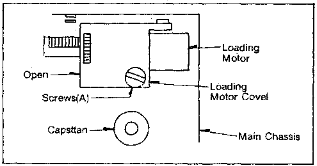

Loading Motor
Open
Loading Motor Covel
Screws(A)
Capsttan
Main Chassis

Fig. 13-2 Emergency Eject

(3) Confirm that the idler touches the supply reel as shown in figure 13–3.

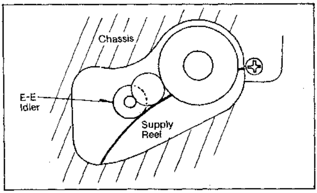

Chassis
E-E Idler
Supply Reel

Fig. 13–3 E–E Idler

(4) Confirm that the Emergency Eject detect switch of chassis bottom is turned ON.

(5) If it is not, adjust Emergency Eject detect switch position so that the there is a little clearance when the E–E detect switch is turned ON as shown in figure 13–4.

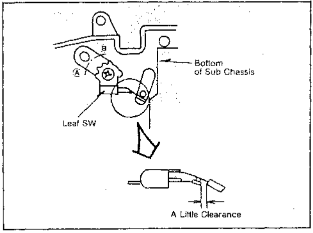

a
A
Bottom of Sub Chassis
Leaf SW
A Little Clearance

Fig. 13–4 E–E Detect Switch Position

14. Replacement of the T–Brake Unit and the T–Brake solenoid

(1) Open the Main Chassis. (refer to the Section 12.)

(2) Remove the E–ring (A) and remove the Spring (B) as shown in figure 14–1.

(3) Unsolder the 3 wires (A) on the Reel Base P.C.B. as shown in figure 14–2.

(4) Unscrew the 2 screws (B) and remove the T–Brake solenoid Unit as shown in figure 14–3.

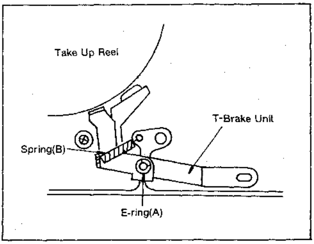

Take Up Reel
T-Brake Unit
Spring(B)
E-ring(A)

Fig. 14–1 T–Brake Unit Removal

(5) Remove the T–Brake Solenoid Unit.

(6) Install the new T–Brake Unit and reverse the previous steps.

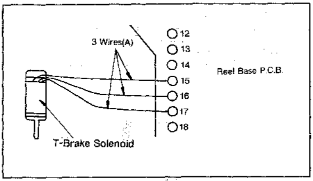

3 Wires(A)
12
13
14
15
16
17
18
Reel Base P.C.B.
T-Brake Solenoid

Fig. 14–2 T–Brake Solenoid Soldering

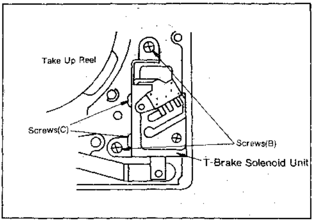

Take Up Reel
Screws(C)
Screws(B)
T-Brake Solenoid Unit

Fig. 14–3 T–Brake Solenoid Unit Removal

(7) Unscrew the 2 screws (C) and remove the T–Brake Solenoid as shown in figure 14–3.

(8) Install the new T–Brake Solenoid Unit and solder the 3 wires.

(9) Reverse the previous steps.

(10) After replacement, adjust the Brake Torque (refer to Section 16).

Note:
When installing the T–Brake Solenoid Unit, be careful to use the correct part Number.

15. Replacement of the S-Brake Unit and the S-Brake Solenoid

(1) Remove the Sub Chassis. (Refer to the Section 12.)
(2) Unsolder the 3 wires (A) on the Sub Chassis as shown in figure 15-1.

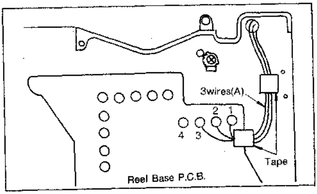

3wires(A)
2
1
4
3
Tape
Reel Base P.C.B.

Fig. 15-1 S-Brake Solenoid Soldering

(3) Unscrew the 2 screws (B) and remove the E-ring (C) as shown in figure 15-2.
(4) Remove the spring (D) and remove the S-Brake Unit and S-Brake Solenoid as shown in figure 15-2.

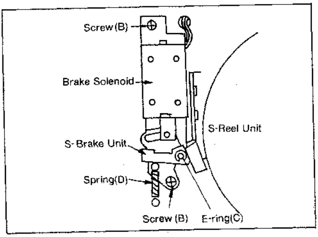

Screw(B)
Brake Solenoid
S-Reel Unit
S-Brake Unit
Spring(D)
Screw (B)
E-ring(C)

Fig. 15-2 S-Brake Unit

(5) Install the new S-Brake Unit and S-Brake Solenoid to the original position, reverse the previous steps.

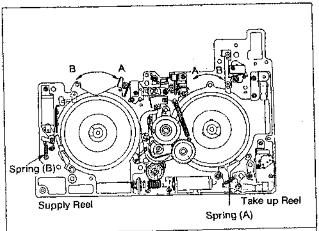
Note:
When installing the S-Brake Solenoid.

(6) Solder the 3 wires (A) and put them in the same position at the Reel Base P.C.B.
(7) After replacement, adjust the S-Brake Solenoid Position (refer to Section 17) and Brake Torque (refer to Section 16)

16. Confirmation and Adjustment of Brake Torque

* Tools Required
Dial Torque Gauge (VFK0133)
Dial Torque Gauge Adaptor (VFK0134)

(1) Remove the cassette compartment (refer to Section 12.) and disconnect the 2 connectors (P605 and P610).
(2) Attach the dial torque gauge adaptor to the dial torque gauge.
(3) Lift the gauge (with adaptor) slightly from the table and turn the dial torque geuge in the direction shown in figure 15-1 and check that the value when brake slippage begins is within specification. begins to slip.
(4) If it is not specification of take up side, change the spring (A) or T-Brake Unit. (refer to Section 14).
(5) If it is not specifictation of supply side, and change the spring (B). or S-Brake Unit. (refer to Section 15)


B
A
A
B
Spring (B)
Supply Reel
Take up Reel
Spring (A)

	A	B
Take-up	250~450g · cm	45~90g · cm
Supply		

Fig. 16-1 Brake Torque specification

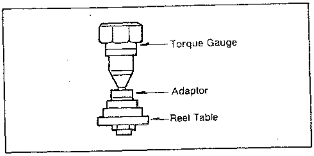

Torque Gauge
Adaptor
Reel Table

Fig. 16-2 Measuring Method

17. Supply Brake Solenoid Position Adjustment

(1) After removing the Sub Chassis from the Main Chassis, release the supply brake solenoid as shown in figure 17–1.
(2) Confirm that the clearance A is 0.5~0.8mm as shown in figure 17–1.

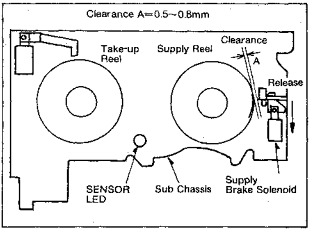

Clearance A=0.5~0.8mm
Take-up Reel
Supply Reel
Clearance
A
Release
SENSOR LED
Sub Chassis
Supply Brake Solenoid

Fig. 17–1 Supply Brake Solenoid Position

(3) If it is not, slightly loosen the 2 screws (B) under the supply brake solenoid and adjust the solenoid position as shown in figure 17–2.

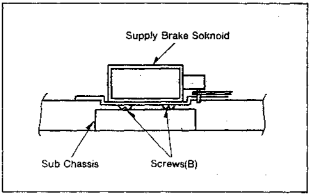

Supply Brake Soknoid
Sub Chassis
Screws(B)

Fig. 17–2 Side View of Sub Chassis

18. Replacement of the Small Reel Up Down Motor Unit

(1) Remove the cassette compartment.
(2) Unsolder the 2 lead wires (A) of the Small Reel Up Motor.
(3) Unscrew the 2 screws (B) and remove the Up Down Motor Unit as shown in figure 18–1.

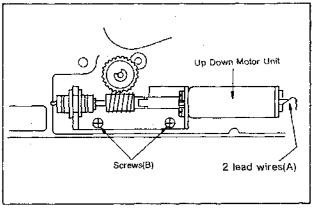

Up Down Motor Unit
Screws(B)
2 lead wires(A)

Fig. 18–1 Up Down Moter Unit Removal

(4) Install the new Up Down Motor Unit and reverse the previous steps.

19. Replacement of the Supply and the Take-Up Reel Tables

(1) Remove the Sub Chassis. (refer to Section 12.)
(2) Remove the Idler Gear Unit and Small Cassette Reel Unit. (refer to Replacement of the Idler Gear Unit and the Small Cassette Reel Unit refer to Section 20-21.)
(3) Pull the Supply or Take-Up tables which are removed as shown in figure 19.

Note:
Be careful not to pull strongly when removing the Reel Tables.

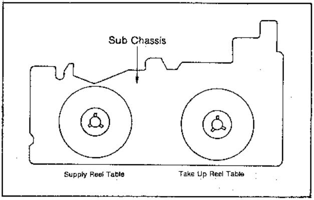

Sub Chassis
Supply Reel Table
Take Up Reel Table

Fig. 19 Rell Table Removal

(4) Install the new Reel Table and install the Reel Base Unit carefully.

20. Replacement and adjustment of the Idler Gear Unit

20-1. Replacement

(1) Remove the Sub Chassis. (refer to Section 12)
(2) Remove the E-ring (A) and remove the Spring (B) as shown in figure 20-1.
(3) Remove the Idler Gear Unit as shown in figure 20-1.
(4) Install the new Idler Gear Unit and reverse the previous steps.
(5) After replacement adjust the Idler Gear position.

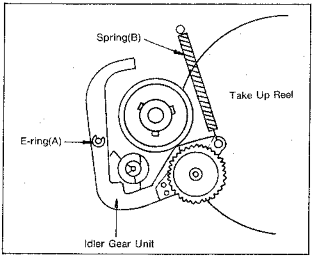

Spring(B)
Take Up Reel
E-ring(A)
Idler Gear Unit

Fig. 20-1 Idler Gear Unit Removal

20-2. Adjustment

* Tools Required:
Eccentric Screwdriver (VFK0357)

(1) Turn the small reel UP/DOWN motor by hand so that the small reel unit is placed in the upper position.
(2) Confirm that the idler gear is touched to small reel and take-up reel.
(3) Release the take-up reel brake.
(4) Turn the take-up reel by hand.
(5) Confirm that the idler gear lotates smoothly.
(6) When it sounds the noise, slightly loosen the screw (A) and insert the eccentric screwdriver into the hole (B) as shown in figure 20-2.
(7) Adjust the position of the micro switch base so that the idler gear doesn't sound the noise.

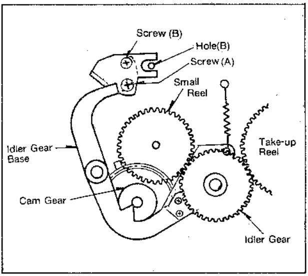

Screw (B)
Hole(B)
Screw (A)
Small Reel
Take-up Reel
Idler Gear Base
Cam Gear
Idler Gear

Fig. 20-2 Idler Gear Position

21. Replacement of the Small Cassette Reel Unit

(1) Remove the Sub Chassis. (refer to Disassembly Method Section 1-1 and Section 12.)

(2) Confirm that the Small Cassette Reel Unit is in the down position, if it is not, turn the warm shaft so that the Small Cassette Reel Unit is in the down position as shown in figure 21-1.

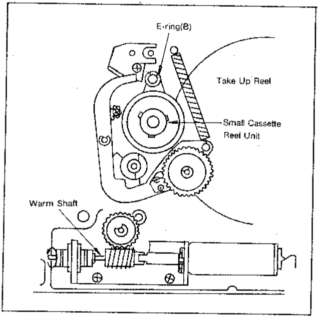

E-ring(B)
Take Up Reel
Small Cassette Reel Unit
Warm Shaft

Fig. 21-1 Small Cassette Reel Unit Removal

(3) Remove the Spring (A) as shown in figure 21-2.

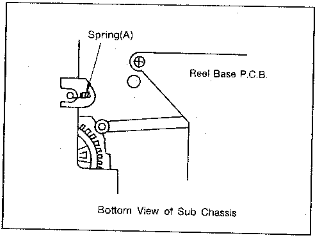

Spring(A)
Reel Base P.C.B.
Bottom View of Sub Chassis

Fig. 21-2 Spring Removal

(4) Remove the E-ring (B) and remove the Small Cassette Reel Unit as shown in figure 21-2.

(5) Install the new Small Cassette Reel Unit and reverse the previous steps.

22. Re placement and Adjustment Eject Detect Sw itch

22-1. Replacement

(1) Remove the Sub Chassis. (refer to Section 12.)

(2) Unsolder the wire (A) from the leaf switch (1) at the Reel Base P.C.B.

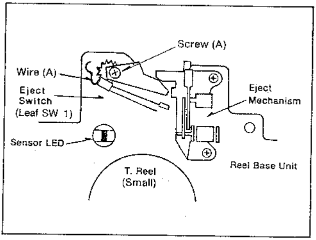

Screw (A)
Wire (A)
Eject Switch (Leaf SW 1)
Eject Mechanism
Sensor LED
Reel Base Unit
T. Reel (Small)

Fig. 22-1 Eject Detect Switch

(3) Unscrew the screw (A) and remove the Eject Detect Switch as shown in figure 22-1.

(4) Install the new leaf switch and revers the previous steps.

(5) After replacement, adjust the Eject Detect

22-2. Adjustment

(1) Push the portion (A) and place the Eject Lock Mechanism in the Cassette IN mode.

(2) Adjust the position of the Eject switch by hand so that the clearance (A) of the switch is more than 0.5mm as shown in figure 22-2.

(3) Confirm that the Eject Switch is turned "ON" when the Eject Lock Mechanism is placed in thte Eject mode.

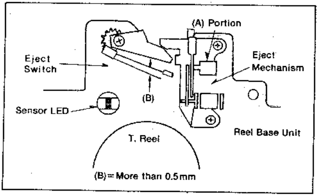

(A) Portion
Eject Switch
Eject Mechanism
(B)
Sensor LED
Reel Base Unit
T. Reel
(B)=More than 0.5mm

Fig. 22-2 Eject Switch Position

23. Replacement of the Cassette Up/Down Switches

(1) Remove the Sub Chassis. (refer to Section
(2) Remove the Idler Unit (Refer to the Section 20).
(3) Unsolder the 2 wires of the leaf switches.
(4) Unscrew the 2 screws (C), (D), and remove the Leaf switches as shown in figure 23.

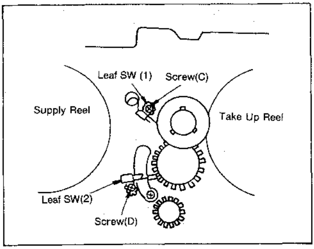

Leaf SW (1)
Screw(C)
Supply Reel
Take Up Reel
Leaf SW(2)
Screw(D)

Fig. 23 Leaf SWs

(5) Install the new Leaf SW and revers the previous steps.
(6) After replacement, adjust the Leaf SW position (refer to Section 24.)

24. Small Cassette Up/Down Switch Position Adjustment

(1) After removing the Sub Chassis from the Main Chassis, place the Small Reel in the up position by turning the Up/Down motor as shown in figure 24.
(2) Confirm that the up position detect switch is ON when the Up/Down motor is stopped at the reel up completion.
(3) If it is not, adjust the position of the up detect switch so that there is a little clearance when the Up/Down motor is stopped at the small reel up completion as shown in figure 23.
(4) Place the Small Reel in the down position by turning the Up/Down motor as shown in figure 24.
(5) Confirm that the up position detect switch is ON when the Up/Down motor is stopped at the reel down completion.
(6) If it is not, adjust the position of the down detect switch so that there is a little clearance when the Up/Down motor is stopped at the small reel down completion as shown in figure 24.

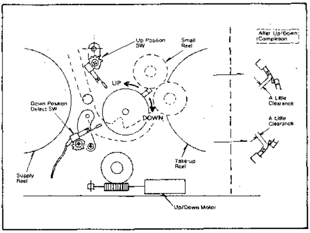

Up Position SW
Small Reel
After Up/Down Completion
UP
DOWN
Down Position Detect SW
A Little Clearance
A Little Clearance
Take-up Reel
Supply Reel
Up/Down Motor

Fig. 24 Up/Down Switch Postion

25. Replacement of the Tension Plate Spling

(1) Remove the cassette cover and Top panel.
(2) Remove the washer (A) and be carefull there is a spring under the washer (A).
(3) Remove the P4 Arm Unit.
(4) Remove the screw (B) and remove the Tension Plate Spring.

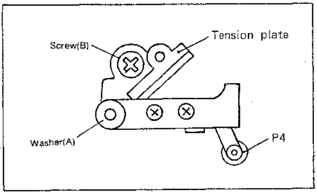

Screw(B)
Tension plate
Washer(A)
P4

Fig. 25 Tension Plate Spling

(5) Install the new Tension Plate Spling and attach the new washer.
(6) Reverse the previous steps.
(7) After install the tension plate spring, adjust the Tension (1) adjustment on the electrical adjustment.

ELECTRICAL ADJUSTMENTS

This section covers the electrical adjustment.

Note:

1. Some preference switches are located on printed circuit boards within the unit. Be wure to turn off the power prior to opening the unit, before changing the position of any switch, and especially before removing or reinserting any circuit board.
2. Pre-heat the unit over two hours before the electrical adjustment.
3. After servicing and adjustment, see to it that all parts such as insulation barriers, insulators, shields, jumper wires, and witing harnesses are properly re-installed as originally found.

Panasonic

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MII FORMAT ALIGNMENT TAPE PAL

MIN:SEC	LINEAR AUDIO		FM AUDIO		VIDEO	
	SIGNAL	PURPOSE	SIGNAL	PURPOSE	SIGNAL	PURPOSE
0:00	1KHz OVU	OUTPUT LEVEL ADJ. LEVEL METER ADJ.	1KHz OVU	OUTPUT LEVEL ADJ. LEVEL METER ADJ.	COLOUR BAR	VIDEO LEVEL ADJ. PG SHIFTER ADJ. CHROMA PHASE & GAIN ADJ. Y/C TIMING ADJ.
6:00					VIDEO SWEEP	Y,C FREQUENCY EQUALIZER ADJ.
12:00					RAMP	HIGH FREQUENCY LINEARITY
15:00	1KHz REF.	FREQUENCY RESPONSE	1KHz REF.	FREQUENCY RESPONSE	BOW TIE	Y/C TIMING ADJ. NON LINEAR ADJ.
16:00	-10 dBU 40Hz 63Hz 125Hz 250Hz 500Hz 1KHz 2KHz 4KHz 6.3KHz 8KHz 10KHz 12.5KHz 14KHz 15KHz (EACH TONE 15 SEC)		-10 dBU 40Hz 63Hz 125Hz 250Hz 500Hz 1KHz 2KHz 4KHz 6.3KHz 8KHz 10KHz 12.5KHz 14KHz 15KHz 20KHz (EACH TONE 15 SEC)			
18:00					20T PULSE	Y/C TIMING ADJ. Y/C TIMING CONFIRM
21:00					COLOUR BAR (3H D.O.)	D.O.C.LEVEL ADJ.
23:00	7.5KHz (CH2)	X VALUE ADJ.			Field Skip	X VALUE ADJ.
26:00	3KHz (STEREO)	A/C HEAD HEIGHT ADJ.			Y:8.3MHz C:6.2MHz SINEWAVE	LINEARITY ADJ. HORIZONTAL POSITION (X VALUE ADJ.)
31:00	15KHz	A/C HEAD AZIMUTH ADJ.				
35:00						

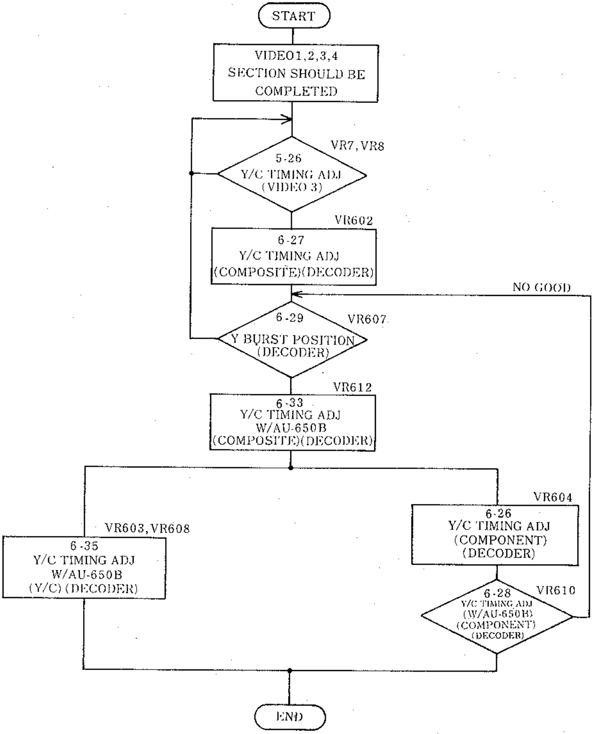
TEST AND SERVICE EQUIPMENT

To perform the electrical adjustment completely, following equipments are required. ○ = USING

PART NO.	NAME	REMARK	AU-650B	AU-505 AU-500	AU-400
1411	COMPOSITE SIGNAL GENERATOR	TEKTRONIX	○	○	
TSG 300	COMPONENT SIGNAL GENERATOR	TEKTRONIX	○	○	
------	SINEWAVE SIGNAL GENERATOR	Frequency Bandwidth 20 MHz	○	○	○
205/2	VIDEO SWEEP GENERATOR	SHIBASOKU MAKER 0.1, 1, 2, 3, 4.43, 5.5, 8, 10	○	○	○
------	DIGITAL VOLT METER		○	○ (○)	○
------	FREQUENCY COUNTER	1mHz	○	○	○
------	DUAL TRACE OSCILLOSCOPE	Frequency Bandwidth more than 100 MHz	○	○ (○)	○
------	VTVM or ACVM	Frequency Bandwidth 4 Hz ~ 500 KHz	○	○ (○)	○
1485R	WAVEFORM MONITOR	TEKTRONIX	○	○ (○)	○
WFM-300	WAVEFORM MONITOR	TEKTRONIX	○	○	○
521A	VECTOR SCOPE	TEKTRONIX	○	○ (○)	○
------	SECTRUM ANALYZER	Frequency Bandwidth 10 Hz ~ 120 MHz	○	○	○
------	DC POWER SUPPLY	0 V ~ 14 V, 10 A		○ (○)	○
1751	SCH METER	TEKTRONIX	○	○	
1510	DISTORTION METER	SOUND TECHNOLOGY	○	○	○
VFM7180EG	ALIGNMENT TAPE	Panasonic Service Tool	○	○ (○)	
VFM7181EC	ALIGNMENT TAPE	Panasonic Service Tool			○
VFK040	COMPONENT IN CABLE (BNC → 12 Pin)	Panasonic Service Tool	○		
VFK0409	COMPONENT OUT CABLE (12 Pin → BNC)	Panasonic Service Tool	○	○	
VFK0132	BACK TENSION METER (T2-H5-UM or T2-H7-UM)	TENTELO	○	○	
VFK0425	SYNCRO CONNECTOR	Panasonic Service Tool		○	
VFK0385	COMPONENT INPUT CABLE (BNC → 26 Pin)	Panasonic Service Tool		○	
VFK0386	A/R BIAS CURRENT CONNECTOR	Panasonic Service Tool		○	
VFK0470	20PIN EXTENSION CABLE SET (X6)	Panasonic Service Tool	○	○ (○)	○
VFK0411	LTC REC CURRENT CONNECTOR	Panasonic Service Tool			○

[A1:L62]

Y/C TIMING FLOW CHART

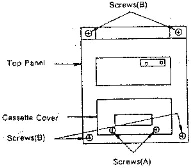

START
VIDEO1,2,3,4 SECTION SHOULD BE COMPLETED
VR7, VR8
5-26 Y/C TIMING ADJ (VIDEO 3)
VR602
6-27 Y/C TIMING ADJ (COMPOSITE)(DECODER)
NO GOOD
6-29 Y BURST POSITION (DECODER)
VR607
VR612
6-33 Y/C TIMING ADJ W/AU-650B (COMPOSITE)(DECODER)
VR604
6-26 Y/C TIMING ADJ (COMPONENT) (DECODER)
VR603, VR608
6-35 Y/C TIMING ADJ W/AU-650B (Y/C) (DECODER)
6-28 Y/C TIMING ADJ (W/AU-650B) (COMPONENT) (DECODER)
VR610
END

DISASSEMBLY METHOD

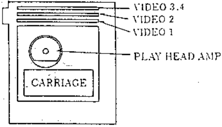
1. TOP PANEL REMOVAL
(FOR VIDEO 1·2·3·4 ADJ.)

1). Unscrew 2 screws (A) and remove the Carriage Cover.

2). Unscrew 4 screws (B) and remove the Top Panel.

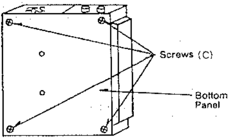

Screws(B)
Top Panel
Cassette Cover
Screws(B)
Screws(A)

3). Printed Circuit Board Location.

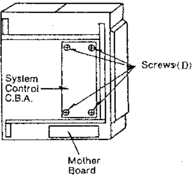

VIDEO 3.4
VIDEO 2
VIDEO 1
PLAY HEAD AMP
CARRIAGE

2. BOTTOM COVER REMOVAL
(FOR SYSCON/POWER/AUDIO OUT ADJ.)

1). Unscrew 4 screws (C) and remove the Bottom Cover.

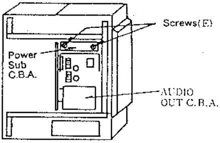

Screws (C)
Bottom Panel

2). Unscrew 4 screws (D) and remove the System Control P.C.B.


Screws (D)
System Control C.B.A.
Mother Board

3). Unscrew 2 screws (E) and remove the Power Sub P.C.B.

4). You are able to see the Power P.C.B. and Audio Out P.C.B.

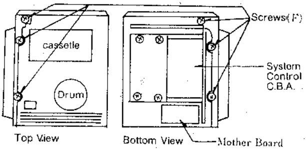

Screws(E)
Power Sub C.B.A.
AUDIO OUT C.B.A.

3. JACK PANEL REMOVAL
(FOR DECODER/AUDIO MONITOR ADJ.)

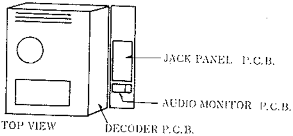
1). Remove the Top Panel and Bottom Panel.

2). Unscrew 6 screws (F).

3). Open the Jack Panel.


cassette
Drum
Screws(F)
System Control C.B.A.
Top View
Bottom View
Mother Board

4). Printed Circuit Board Location.

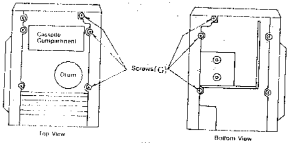

JACK PANEL P.C.B.
AUDIO MONITOR P.C.B.
TOP VIEW
DECODER P.C.B.

4. SIDE PANEL REMOVAL
(FOR SERVO ADJ.)

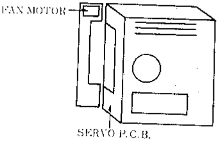
1). Remove the Top Panel and Bottom Panel.

2). Unscrew 6 screws (G).

3). Open the Side Panel.

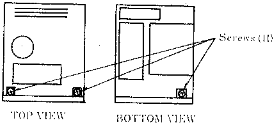

Cassette Compartment
Drum
Screws(G)
Top View
Bottom View

4). Printed Circuit Board Location.

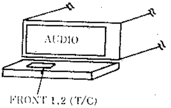

FAN MOTOR
SERVO P.C.B.

5. FRONT PANEL REMOVAL
(FOR AUDIO ADJ.)

1). Remove the Top Panel, Bottm Panel, Jack Panel and Side Panel.
2). Unscrew 3 screws (H).
3). Open the Front Panel.


Screws (H)
TOP VIEW
BOTTOM VIEW

4). Printed Circuit Board Location.


AUDIO
FRONT 1,2 (T/C)

< POWER SUPPLY SECTION >

1-1. +5V SYSCON ADJUSTMENT

(POWER SUPPLY)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
P401-6 (SYSTEM CONTROL)	REC (with C.PB)	BLANK ■ TAPE	DIGITAL VOLTAGE METER	--------------	VR3 (+5V SYS)
		ALIGNMENT ☐ TAPE			

ADJUSTMENT PROCEDURE & SPECIFICATION	
DIGITAL VOLTAGE METER → P401-6 (SYSCON)	SPEC : +5V (+/- 0.5V) VR3

1-2. +5V ADJUSTMENT

(POWER SUPPLY)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
P310-8 (MOTHER BOARD)	REC (with C. PB)	BLANK ■ TAPE	DIGITAL VOLTAGE METER	--------------	VR4 (+5V)
		ALIGNMENT ☐ TAPE			

ADJUSTMENT PROCEDURE & SPECIFICATION	
DIGITAL VOLTAGE METER → P310-8	SPEC : +5V (+/- 0.1V) VR4

1-3. -5V ADJUSTMENT

(POWER SUPPLY)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
P310-5 (MOTHER BOARD)	REC (with C. PB)	■ BLANK TAPE ☐ ALIGNMENT TAPE	DIGITAL VOLTAGE METER	---------------	VR1 (-5V)

ADJUSTMENT PROCEDURE & SPECIFICATION	
DIGITAL VOLTAGE METER → P310-5	SPEC : -5V (+/- 0.1V) VR1

1-4. +9V ADJUSTMENT

(POWER SUPPLY)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
P310-3 (MOTHER BOARD)	REC (with C.PB) (AU-500) PLAY (AU-505)	■ BLANK TAPE ☐ ALIGNMENT TAPE	DIGITAL VOLTAGE METER	--------------	VR2 (+9V)

ADJUSTMENT PROCEDURE & SPECIFICATION	
DIGITAL VOLTAGE METER → P310-3	SPEC : +9V (+/-0.05V)

< SYSTEM CONTROL SECTION >

2-1. BATTERY REMAINING DETECT LEVEL ADJUSTMENT

(SYSTEM CONTROL)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP8 TPG2 TP9 TP13	REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	DIGITAL VOLTAGE METER	---------------	VR3 (BATTERY REM.)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

1. Connect a variable DC power supply to EXT DC INPUT and set the power select switch to the EXT. position.

2. DVM(+) → TP8(SYSCON)
   (-) → TPG2(SYSCON)

   Adjust the D.V.M. so that the voltage becomes +12V at TP8.

TP8 = +12V

Step 2.

1. Mesure the voltage of TP9 and memorize the voltage.

2. Connect the D.V.M. to TP13 and adjust VR3 so that the voltage of TP13 in proportion to TP9 per the right side following chart.

VR3

+5V (TP9)	TP13
4.8V	4.3V
4.9V	4.39V
5.0V	4.48V
5.1V	4.57V
5.2V	4.66V

< SERVO SECTION >

3-1. DC VOLTAGE CONFIRMATION

(SERVO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
P505 - 1 P505 - 5 P505 - 6 P505 - 7 P503 - 9	STOP LOADING COMPLETION	BLANK ■ TAPE ALIGNMENT ☐ TAPE	DIGITAL VOLTAGE METER	COMPOSITE COLOUR BAR (Y)	-------------

ADJUSTMENT PROCEDURE & SPECIFICATION

DVM → P505 - 1
P505 - 5
P505 - 6
P505 - 7
P503 - 9

TEST POINT	CONFIRMATION VOLTAGE
P505①	12.0 ± 0.5 (V)
⑤	9.0 ± 0.2 (V)
⑥	5.0 ± 0.2 (V)
⑦	-5.0 ± 0.2 (V)
P503⑨	3.0 ± 0.3 (V)

3-2. DRUM VH +V ADJUSTMENT

(SERVO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
P501 - 11	STOP	BLANK ■ TAPE ALIGNMENT ☐ TAPE	DIGITAL VOLTAGE METER	---------------	VR4 (DRUM VH +V)

ADJUSTMENT PROCEDURE & SPECIFICATION

DVM → P501 - 11

SPEC : 1.5V (+/- 0.1V)
VR4

3-3. TENSION (1) ADJUSTMENT

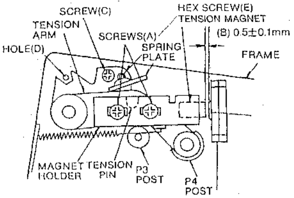
(SERVO)

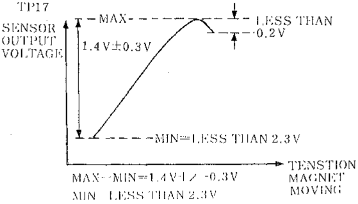
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP14 TP17	EJECT E-E	■ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE DIGITAL VOLTAGE METER	--------------	VR5 (TENSION SENSOR OFFSET)

ADJUSTMENT PROCEDURE & SPECIFICATION

※ TOOLS REQUIRED
Eccentric Screw Driver

1. Turn the POWER SW ON without cassette.
2. Remove the 2 screws (A) and remove the tension magnet.
3. Connect the digital voltage meter to TP14 and memorize the voltage.
4. Connect the D.V.M. to TP17 and confirm that the voltage is TP14 - TP17 = 0V (+/- 0.005V)
5. If it is not, adjust VR5 so that the TP14 - TP17 = 0V (+/- 0.005V).
6. Insert the tension magnet and tighten the 2 screws (A) so that the clearance between tension magnet and tension sensor is about 0.5mm.
7. Connect the scope to TP17 and set the scope to DC mode.
8. Slide the tension magnet left to right or right to left.
9. Confirm the voltage between maximum and minimum is 1.4V (+/- 0.3V) as shown right side.
10. If it is not, slightly loosen the 2 screws (A) and adjust the position of the tension magnet.
11. Repeat the step 7 ~ 10 until the relationship of sensor output and tension magnet is as shown in step 9.

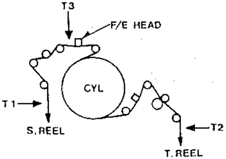
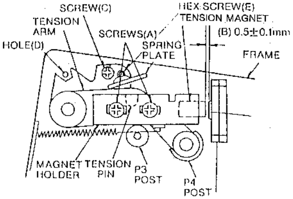

SCREW(C)
HEX SCREW(E)
TENSION MAGNET
TENSION ARM
SCREWS(A)
(B) 0.5±0.1mm
HOLE(D)
SPRING PLATE
FRAME
MAGNET HOLDER
TENSION PIN
P3 POST
P4 POST



3-4. TENSION (2) ADJUSTMENT

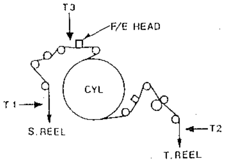
(SERVO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP14	REC	■ BLANK TAPE (90 MINUTES MIDDLE PORTION) ☐ ALIGNMENT TAPE	TENTERO METER DIGITAL VOLTAGE METER	COMPOSITE COLOUR BAR	SPRING PLATE (ON MECHANISM)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. TENTERO METER → T3	 T3 F/E HEAD CYL T1 S.REEL T2 T.REEL TP 3 : 30g (+/- 2g)
Step 2. 1. If it is not, slightly loosen the screw (C) and insert the Eccentric Screwdriver into the hole (D). 2. Adjust the position of the Spring Plate so that the meter indication is 30g (+/- 2g). 3. If it is not, turn the hex screw (E) so that the meter indication is 30g (+/- 2g).	 SCREW(C) HEX SCREW(E) TENSION MAGNET TENSION ARM SCREWS(A) (B) 0.5±0.1mm HOLE(D) SPRING PLATE FRAME MAGNET HOLDER TENSION PIN P3 POST P4 POST
Step 3. (CONFIRMATION) DVM → TP14	TP14 : 2.5V (+/- 0.2V)

3-5. TENSION (3) ADJUSTMENT (SERVO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
T1 T2	FF REC	■ BLANK TAPE (90 MINUTES) MIDDLE PORTION ☐ ALIGNMENT TAPE	TENTERO METER	COMPOSITE COLOUR BAR	VR9 (FWD)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. (CONFIRMATION) TAPE = MIDDLE MODE = FF TENTERO METER → T2	 T2 : 25g (+/- 10g)
Step 2. TAPE = MIDDLE MODE = REC TENTERO METER → T2	VR9 T2 : 30g (+/- 5g)
Step 3. (CONFIRMATION) TAPE = MIDDLE MODE = DURING AUTO BACK TENTERO METER → T1	T1 : 20g (+/- 10g)

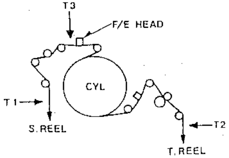
3-6. TENSION CONFIRMATION

(SERVO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
T1 T2 T3	REC FF REW	■ BLANK TAPE (90 MINUTES) ☐ ALIGNMENT TAPE	TENTERO METER	COMPOSITE COLOUR BAR	-------------------

ADJUSTMENT PROCEDURE & SPECIFICATION

1. After adjusting the TENSION (1),(2),(3) adjustments, check the specification at each mode and position.



POSITION MODE		T1	T2	T3
REC PLAY	Tape Begin	—	30^{+15}_{-10} (gr)	25±5 (gr)
	Tape End	—	30±10 (gr)	30±5 (gr)
FF	Tape Begin	10±10 (gr)	25±10 (gr)	—
	Tape End	10±10 (gr)	25±10 (gr)	—
REW	Tape Begin	25±10 (gr)	10±10 (gr)	—
	Tape End	25±10 (gr)	10±10 (gr)	—
REV (−×5)	Tape Begin	25±10 (gr)	30±10 (gr)	—
	Tape End	40^{+15}_{-10} (gr)	25±10 (gr)	—

2. After check the specification, confirm that the tape speed decrease at the begining and end of the tape in FF and REW mode.

3-7. REC SHIFTER ADJUSTMENT

(SERVO)

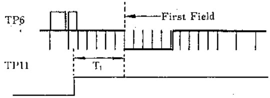
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP6 (SERVO SUB 1) TP11 (SERVO)	REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPOSITE COLOUR BAR	VR3 (REC SHIFTER)

ADJUSTMENT PROCEDURE & SPECIFICATION

SCOPE CH 1 → TP6 (SERVO SUB 1)

SCOPE CH 2 → TP11 (SERVO)

⦸ VR3



T_1=2.75±0.1(H)

3-8. TRACKING FIX ADJUSTMENT

(SERVO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP11 (VIDEO 1) TP11 (SERVO)	SELF REC ↓ PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE	OSCILLO SCOPE	COMPOSITE COLOUR BAR	VR2 (TRMM)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. Machine Condition

TBC SW : OFF

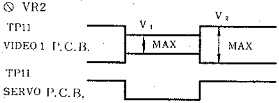
TRACKING : DETENT POSITION

Step 2.

SCOPE CH 1 : TP11 (VIDEO 1)

SCOPE CH 2 : TP11 (SERVO)

⦸ VR2

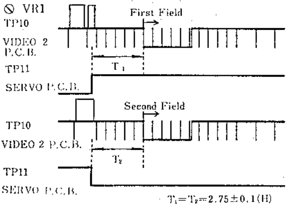


3-9. PG SHIFTER ADJUSTMENT

(SERVO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP10 (VIDEO 2) TP11 (SERVO)	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	COMPOSITE COLOUR BAR	VR1 (PG SHIFTER) (SERVO) SW1A · SW1B SW2A · SW2B (SERVO SUB)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. CONDITION	1. Mechanical Interchangeability adjustment should be completed. 2. Envelope : MAXIMUM
STEP 2. SCOPE CH 1 : TP10 (VIDEO 2) SCOPE CH 2 : TP11 (SERVO)	 ⊘ VR1 TP10 VIDEO 2 P.C.B. First Field T₁ TP11 SERVO P.C.B. Second Field TP10 VIDEO 2 P.C.B. T₂ TP11 SERVO P.C.B. $T_1=T_2=2.75\pm0.1$(H)
Step 3. (CONFIRMATION) ITEM 3-7. REC SHIFTER ADJUSTMENT 3-9. PG SHIFTER ADJUSTMENT	3-7. By the Recording mode. 3-8. By the Self Recording/Playback and master tape playback.

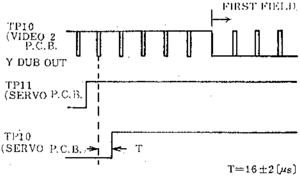
3-10. WALLER CIRCUIT CONFIRMATION

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP10 (SERVO) TP11 (SERVO) TP10 (VIDEO 2)	SELF REC/PLAY	■ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPOSITE COLOUR BAR	--------------------

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

SCOPE CH 1 : TP10 (VIDEO 2)
SCOPE CH 2 : TP11 (SERVO)
SCOPE CH 3 : TP10 (SERVO)


FIRST FIELD
TP10
(VIDEO 2
P.C.B.
Y DUB OUT
TP11
(SERVO P.C.B.
TP10
(SERVO P.C.B.
T
T=16±2(μs)

Step 2.

1. Confirm that the phase relation ship of second field between TP10 (VIDEO 2) and TP11 (SERVO) and TP10 (SERVO).

3-11. SYNCHRONIZATION CONFIRMATION

(SERVO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP4	SELF REC PLAY	■ BLANK TAPE ☐ ALIGNMENT TAPE	FREQUENCY COUNTER	COMPOSITE COLOUR BAR	-------------

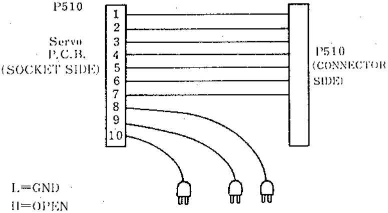
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

1. Make a recording for a few minutes.
2. Turn the power off.

Step 2.

1. Disconnect the connector (P510) on the SERVO.
2. Connect the synchronization check fixture between P510 socket and P510 connector.
3. FREQUENCY COUNTER : TP4
4. Turn the power on and playback the portion just recorded.
5. Check the frequency of TP4 at each condition.



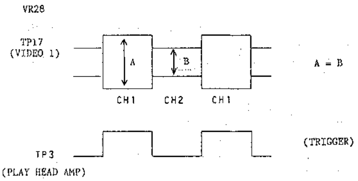
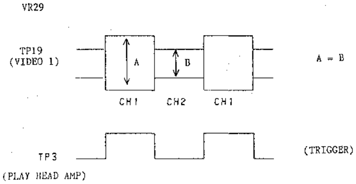
L=GND
H=OPEN

PIN NO			TP4 FREQUENCY
8	9	10	
L	L	H	1800±5(Hz)
H	L	L	1980+/−100(Hz)
L	H	L	1620+/−100(Hz)

4-1. Y & C PLAYBACK RF LEVEL ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP17 TP19 TP3 (PLAY HEAD AMP)	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	---------	VR28 (Y BAL) VR29 (C BAL)

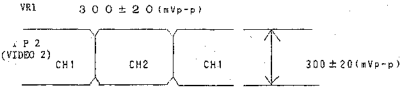
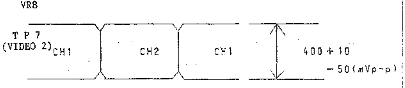
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. SCOPE CH1 : TP17 SCOPE CH2 : TP3 (Trigger) (PLAY HEAD AMP)	 VR28 TP17 (VIDEO 1) A B CH1 CH2 CH1 A = B TP3 (PLAY HEAD AMP) (TRIGGER)
Step 3. SCOPE : TP19 SCOPE CH2 : TP3 (Trigger) (PLAY HEAD AMP)	 VR29 TP19 (VIDEO 1) A B CH1 CH2 CH1 A = B TP3 (PLAY HEAD AMP) (TRIGGER)

4-2. Y PLAYBACK RF LEVEL ADJUSTMENT

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP2 TP7 TP3 (PLAY HEAD AMP)	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	-----------	VR1 (Y RF LEVEL) VR8 (Y V-V RF LEVEL)

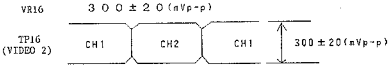
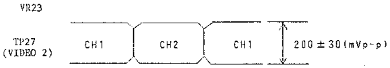
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. 1. If the channel balance is not completed at TP2, readjust VR28 (Y BAL) on VIDEO 1.	
Step 3. SCOPE CH1 : TP2 SCOPE CH2 : TP3 (Trigger) (PLAY HEAD AMP)	 VR1 300 ± 20 (mVp-p) TP2 (VIDEO 2) CH1 CH2 CH1 300 ± 20 (mVp-p)
Step 4. SCOPE CH1 : TP7 SCOPE CH2 : TP3 (Trigger) (PLAY HEAD AMP)	 VR8 TP7 (VIDEO 2) CH1 CH2 CH1 400 + 10 − 50 (mVp-p)

4-3. C PLAYBACK RF LEVEL ADJUSTMENT

(VIDEO 2)

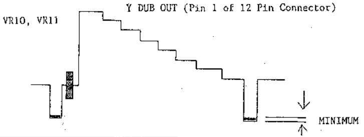
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP16 TP27 TP3 (PLAY HEAD AMP)	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	-----------	VR16 (C RF LEVEL) VR23 (C V-V RF LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. 1. If the channel balance is not completed at TP16, readjust VR29 (C BAL) on VIDEO 1.	
Step 3. SCOPE CH1 : TP16 SCOPE CH2 : TP3 (Trigger) (PLAY HEAD AMP)	 VR16 300±20(mVp-p) TP16 (VIDEO 2) CH1 CH2 CH1 300±20(mVp-p)
Step 4. SCOPE CH1 : TP27 SCOPE CH2 : TP3 (Trigger) (PLAY HEAD AMP)	 VR23 TP27 (VIDEO 2) CH1 CH2 CH1 200±30(mVp-p)

4-4. SYNC TIP CARRIER BALANCE ADJUSTMENT

(VIDEO 2)

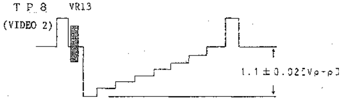
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT.
Y DUB OUT (W/75ohm Termination)	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	-----------	VR10 (Y LIM BAL) VR11 (Y DEMOD BAL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. SCOPE : Y DUB OUT (W/75 ohm Termination)	 Y DUB OUT (Pin 1 of 12 Pin Connector) VR10, VR11 MINIMUM

4-5. Y NON-LINEAR DE-EMPHASIS ADJUSTMENT

(VIDEO 2)

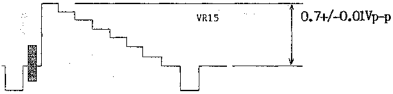
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP8	PLAY BACK	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	-----------	VR13 (Y NL DE LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. SCOPE : TP8	 T P 8 (VIDEO 2) VR13 1.1 ± 0.02[Vp-p]

4-6. Y OUTPUT LEVEL ADJUSTMENT

(VIDEO 2)

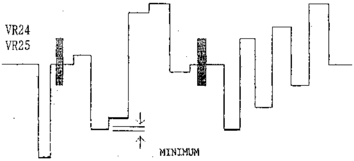
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Y DUB OUT (W/75ohm Termination)	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	-----------	VR15 (Y OUT LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. SCOPE : Y DUB OUT (W/75 ohm Termination)	Y DUB OUT (75 ohm Termination) (Pin 1 of 12 Pin CONNECTOR) 

4-7. C CARRIER BALANCE ADJUSTMENT

(VIDEO 2)

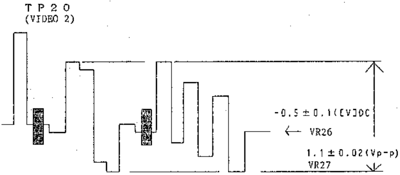
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
C DUB OUT (W/75 ohm Termination)	PLAY BACK	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	-----------	VR24 (C LIM BAL) VR25 (C DEMOD BAL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. SCOPE : C DUB OUT (W/75 ohm Termination)	C DUB OUT (75 ohm Termination) (Pin 1 of 12 Pin CONNECTOR) 

4-8. C DC BAL/C NL DE-EMPHASIS LEVEL ADJUSTMENT

(VIDEO 2)

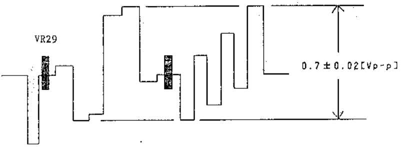
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP20	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	-----------	VR26 (C DC BAL) VR27 (C NL DE LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. SCOPE : TP20	 T P 2 0 (VIDEO 2) -0.5 ± 0.1([V]DC ← VR26 1.1 ± 0.02(Vp-p) VR27

4-9. C OUTPUT LEVEL ADJUSTMENT

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
C DUB OUT (W/75 ohm Termination)	PLAY BACK	☐ BLANK TAPE	OSCILLO SCOPE	-----------	VR29 (C OUT LEVEL)
		■ ALIGNMENT TAPE 100% COLOUR BAR			

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. SCOPE : C DUB OUT (W/75 ohm Termination)	C DUB OUT (75 ohm Termination) (Pin 7 of 12 Pin CONNECTOR) 

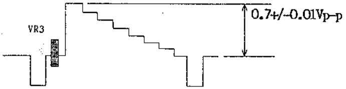
4-10. Y E-E LEVEL ADJUSTMENT (VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Y DUB OUT (W/75 ohm Termination)	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR3 (Y DEV.) (VIDEO 1)

<table>
<tr><th colspan="2">ADJUSTMENT PROCEDURE & SPECIFICATION</th></tr>
<tr><td>Step 1. (CONFIRMATION)

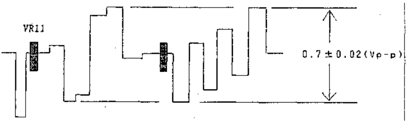
SCOPE : Y DUB OUT
(W/75 ohm Termination)</td><td>Y DUB OUT = 0.7 (+/-0.01) Vp-p
(W/75 ohm Termination)</td></tr>
<tr><td>Step 2.

1. If it is not, adjust VR3(Y DEV.) on VIDEO 1.

2. After adjust VR3, readjust the Y White & Dark Clip Adjustment (7-11)</td><td>Y DUB OUT (75 OHM TERMINATION)
(Pin 1 of 12 Pin CONNECTOR)
 </td></tr>
</table>

4-11. C E-E LEVEL ADJUSTMENT (VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
C DUB OUT (W/75 ohm Termination)	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR11 (C. DEV.) (VIDEO 1)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. SCOPE : C DUB OUT (W/75 ohm Termination)	C DUB OUT = 0.7 (+/- 0.02)Vp-p (W/75 ohm Termination)
Step 2. 1. If it is not, adjust VR11(C. DEV.) on VIDEO 1. 2. After adjust VR11, readjust the C White & Dark Clip Adjustment (7-13).	**C DUB OUT (75 OHM TERMINATION)** **(Pin 7 of 12 Pin CONNECTOR)** 

4-12. Y DL TERMINATION ADJUSTMENT

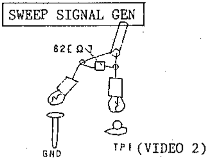
(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP2 TP3	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	SWEEP	VR2 (Y COS COL 1) VR5 (Y COS COL 2)

ADJUSTMENT PROCEDURE & SPECIFICATION

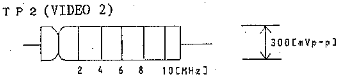
Step 1. (PREPARATION)

1. Remove the VIDEO 1.
2. Fully Clockwise : VR3, VR4, VR6
3. Supply the sweep signal to TP1 (VIDEO 2) with 82ohm resistor.


SWEEP SIGNAL GEN
82[Ω]
GND
TP1 (VIDEO 2)

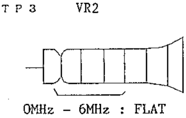
Step 2.

1. SCOPE : TP2
2. Adjust the video gain of sweep signal generator so that the sweep level becomes 300mVp-p at TP2.


TP2 (VIDEO 2)
300[mVp-p]
2 4 6 8 10[MHz]

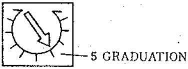
Step 3.

1. SCOPE : TP3
2. Adjust VR2 so that the sweep signal (0MHz and 6MHz) becomes flat.


TP3
VR2
0MHz - 6MHz : FLAT

Step 4.

1. Set VR5 to the 5 graduation.


5 GRADUATION

Step 5.

Finally insert the VIDEO 1 to the original place.

4-13. Y PLAYBACK EQ ADJUSTMENT

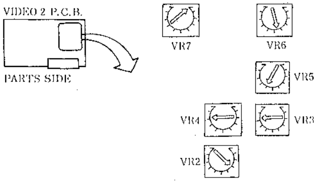
(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Y DUB OUT (W/75ohm)	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE SWEEP PORTION	WAVEFORM MONITOR	------------	VR2 (Y COS COL 1) VR3 (Y CH1 EQ 1) VR4 (Y CH2 EQ 1) VR5 (Y COS COL 2) VR6 (Y EQ 2) VR7 (Y FC LEVEL) VR14 (Y NL LIMIT LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

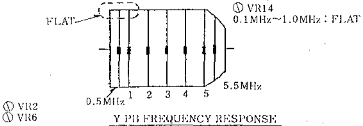
VR Setting



Step 2.

WFM MONITOR : Y DUB OUT (W/75ohm Termination)

1. Adjust VR14 so that the frequency response is flat between 0.1MHz and 1MHz.
2. Adjust VR2 and VR6 so that the frequency response is shown in figure.



Y PB FREQUENCY RESPONSE

Frequency	FOR AU-520S "E" VERSION	FOR AU-520S "B" VERSION	FOR AU-520
0.5MHz	100%(REFERENCE)	100%(REFERENCE)	100%(REFERENCE)
1MHz	100±5%	100±5%	100±8%
2MHz	99±5%	100±5%	100±8%
3MHz	98±5%	100±5%	100±8%
4MHz	97±5%	100±5%	100±8%
5MHz	96±5%	100±5%	100±8%
5.5MHz	....	Beter than 70%	Better than 65%

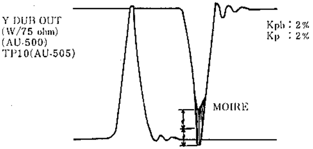
Step 3.

1. If each channel is not balanced, adjust VR3 and VR4 so that the each channel is balanced.

4-14. Y WAVEFORM CHARACTERISTIC ADJUSTMENT

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Y DUB OUT (W/75ohm)	SELF REC/PLAY ↓ PLAY	■ BLANK TAPE ☐ ALIGNMENT TAPE	WAVEFORM MONITOR	COMPONENT 2T PULSE (TSG-300) FOR AU-520S (TSG-130) FOR AU-520	VR2 (Y COS COL 1) VR5

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	The Video (1 Rec Circuit) should be adjusted.
Step 2. 1. Play back the portion just recorded and adjust VR2 so that the Kpb and Kp are less than 2% "A" portion. Note: Measure the Kpb and Kp at centre of moire.	 Y DUB OUT (W/75 ohm) (AU-500) TP10(AU-505) Kpb : 2% Kp : 2% MOIRE
Step 3. Confirm the Y PB EQ ADJ. (Section 4-13) If it is not, readjust VR2 and VR5 until Y PB EQ and Y WFM CHARACTERISTIC are completed.	

4-15. Y SELF REC/PB FREQUENCY RESPONSE CONFIRMATION

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Y DUB OUT (W/75ohm)	SELF REC/PB	■ BLANK TAPE ☐ ALIGNMENT TAPE	WAVEFORM MONITOR	COMPONENT 60% H. SWEEP (TSG-300) FOR AU-520S (TSG-130) FOR AU-520	VR3 (Y CH1 EQ 1) VR4 (Y CH2 EQ 1)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

MACHINE CONDITION

The Video 1 (Rec Circuit) should be adjusted.

Step 2.

1. Play back the portion just recorded.
2. Confirm that the specification of frequency response is shown in figure.
3. If it is not, confirm the following items.
   1) 4-13 Y PB EQ ADJUSTMENT
   2) 7-16 Y RECORDING CURRENT ADJUSTMENT
   3) 7-18 Y REC AMP FREQUENCY RESPONCE ADJUSTMENT

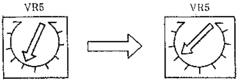
Y SELF REC/PB FREQUENCY RESPONSE

FREQUENCY	FOR AU-520S "E" VERSION	FOR AU-520S "B" VERSION	FOR AU-520
0.5MHz	100%(REFERENCE)	100%(REFERENCE)	100% (REFERENCE)
1MHz	100±5%	100±5%	100±8%
2MHz	99±5%	100±5%	100±8%
3MHz	98±5%	100±5%	100±8%
4MHz	97±5%	100±5%	100±8%
5MHz	96±5%	100±5%	100±8%
5.5MHz	…………	Better than 70%	Better than 65%

4-16. Y S/N CONFIRMATION

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Y DUB OUT (W/75ohm)	SELF REC/PB REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	S/N METER (ROHDE & SCH WARZ) (UP SF2) WIDE BAND	COMPONENT 60% 50% FLAT FIELD	-------------

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	1. The Video 1 Adj. should be finished. 2. Place the VIDEO 2 P.C.B. to its original without Extension Board. 3. Clean the Video Head.
Step 2. 1. Play back the portion just recorded. 2. Confirm that the S/N is better than 44dB. 3. If it is not, turn VR5 to clockwise just 1 frame. 4. After that readjust Y PB EQ ADJ. (Section 4-13) and Y WFM CHARACTERISTIC ADJ. (Section 4-14). 5. Reconfirm the Y S/N again.	

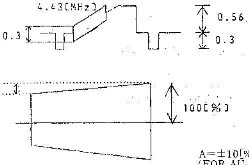
4-17. Y HF LINEARITY CONFIRMATION

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Y DUB OUT (W/75ohm Termination)	SELF REC/PLAY REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	WAVEFORM MONITOR	COMPOSITE 80 IRE RAMP SIGNAL TO COMPONT Y INPUT	-------------

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

1. Supply the composite 80 IRE Ramp Signal.
2. After record the above signal, playback the portion just recorded.
3. Set the input response setting of waveform monitor to 4.43MHz Band Pass mode.
4. Confirm the linearity.

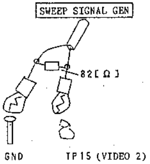
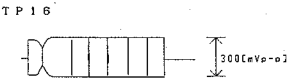
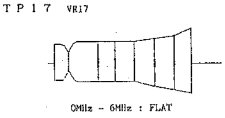


A=±10[%]
(FOR AU-520S)
A=±15[%]
(FOR AU-520)

4-18. C DELAY TERMINATION ADJUSTMENT

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP16 TP17	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	SWEEP	VR17 (C COS COL 1) VR20 (C COS COL 2)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. (PREPARATION) 1. Remove the VIDEO 1. 2. Fully Clockwise : VR18, VR19, VR21 3. Supply the sweep signal to TP15 VIDEO 2) with 82ohm resistor.	 SWEEP SIGNAL GEN 82[Ω] GND TP15 (VIDEO 2)
Step 2. 1. SCOPE : TP16 2. Adjust the Video gain of sweep signal generator so that the sweep level becomes 300mVp-p at TP16.	 TP16 300[mVp-p]
Step 3. 1. SCOPE : TP17 2. Adjust VR17 so that the sweep signal (0MHz ~ 6MHz) becomes flat.	 TP17 VR17 0MHz ~ 6MHz : FLAT
Step 4. 1. Turn VR20 to fully clockwise.	
Step 5. Finally insert the VIDEO 1 to the original place.	

4-19. C PLAYBACK EQ ADJUSTMENT

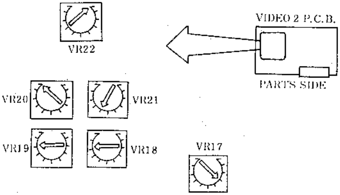
(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
C DUB OUT (W/75ohm Termination)	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE SWEEP PORTION	WAVEFORM MONITOR	-----------	VR17 (C COS COL 1) VR18 (C CH1 EQ 1) VR19 (C CH2 EQ 1) VR20 (C COS COL 2) VR21 (C EQ 2) VR22 (C FC LEVEL) VR28 (C NL LIMIT LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

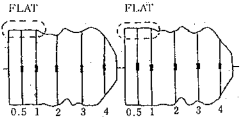
VR Setting



Step 2.

WFM MONITOR : C DUB OUT
(W/75ohm Termination)

1. Adjust VR28 so that the frequency response is flat between 0.1MHz and 1MHz.
2. Adjust VR17 and VR21 so that the frequency response is shown in specification chart.



C PB FREQUENCY RESPONSE

FREQUENCY	FOR AU-520S "E" VERSION	FOR AU-520S "B" VERSION	FOR AU-520
0.5MHz	100%(REFERENCE)	100%(REFERENCE)	100% (REFERENCE)
1MHz	100±5%	100±5%	100±8%
2MHz	99±5%	100±5%	100±8%
3MHz	98±5%	100±5%	100±8%
4MHz	Better than 63%	Better than 70%	Better than 65%

Step 3.

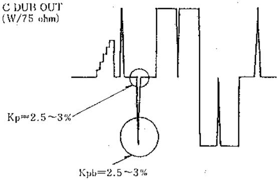
1. If each channel is not balanced, adjust VR18 and VR19 so that the each channel is balanced.

4-20. C WAVEFORM CHARACTERISTIC ADJUSTMENT

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
C DUB OUT (W/75ohm)	SELF REC/PLAY REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	WAVEFORM MONITOR	COMPONENT 5T PULSE (TSG-300) FOR AU-520S (TSG-130) FOR AU-520	VR17 (C COS COL 1)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	The Video 1 (Rec Circuit) should be adjusted.
Step 2. 1. Play back the portion just recorded and adjust VR17 so that the Kpb and Kp are shown in figure. Note: Measure the Kpb and Kp at centre of moire.	
Step 3. Confirm the C PB EQ ADJ. (Section 4-19) If it is not, readjust VR21 and VR17 until Y PB EQ and Y WFM CHARACTERISTIC are in specification.	

4-21. C SELF REC/PB FREQUENCY RESPONSE CONFIRMATION

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
C DUB OUT (W/75ohm Termination)	SELF REC/PB	BLANK ■ TAPE ALIGNMENT ☐ TAPE	WAVEFORM MONITOR	COMPONENT 60% H. SWEEP (TSG-300) FOR AU-520S (TSG-130) FOR AU-520	VR18 (C CH1 EQ 1) VR19 (C CH2 EQ 1) VR21 (C EQ 2)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

MACHINE CONDITION

The Video 1 (Rec Circuit) should be adjusted.

Step 2.

1. Play back the portion just recorded.
2. Confirm that the specification of frequency response is shown in figure.
3. If it is not, confirm the following items.
    1) 4-19 C PB EQ ADJUSTMENT
    2) 7-17 C RECORDING CURRENT ADJUSTMENT
    3) 7-19 C REC AMP FREQUENCY RESPONCE ADJUSTMENT

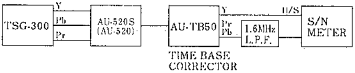
C SELF REC/PB FREQUENCY RESPONSE

FREQUENCY	FOR AU-520S "E" VERSION	FOR AU-520S "B" VERSION	FOR AU-520
0.5MHz	100%(REFERENCE)	100%(REFERENCE)	100% (REFERENCE)
1MHz	100±5%	100±5%	100±8%
2MHz	99±5%	100±5%	100±8%
3MHz	98±5%	100±5%	100±8%
4MHz	Better than 63%	Better than 70%	Better than 65%

4-22. C S/N CONFIRMATION

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Pb OUT Pr OUT of AU-TB50	SELF REC/PB REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	S/N METER (ROHDE & SCH WARZ) (UP SF2)	COMPONENT 50% FLAT FIELD	-------------

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	1. The Video Adj. should be finished. 2. Place the VIDEO 2 P.C.B. to its original without Extension Board. 3. Clean the Video Head. 4. Connect the Time Base Corrector (AU-TB50B) and S/N Meter as shown below. 5. Supply the Y signal to Ext Sync Input from Time Base Corrector. 6. Supply the Pr or Pb signal to S/N Meter Input with 1.6MHz L.P.F.  TSG-300 Y Pb Pr AU-520S (AU-520) AU-TB50 Y Pr Pb 1.6MHz L.P.F. H/S S/N METER TIME BASE CORRECTOR
Step 2. 1. Play back the portion just recorded and measure the meter indication. 2. Confirm that the specification is better than 48dB.	Step 3. 1. Remove the 1.6MHz L.P.F. and connect the Y signal to S/N Meter directly. 2. Set the S/N Meter to WIDE BAND UNWEIGHTED mode. 3. Play back the portion just recorded. 4. Confirm that the specification is better than 45dB.

4-23. Y OVERMODULATION CONFIRMATION

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Y DUB OUT (W/75 ohm Termination)	SELF REC/PB REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	MONITOR TV	COMPONENT 100% H. SWEEP (TSG-300) FOR AU-520S (TSG-130) FOR AU-520	-------------

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

1. Play back the portion just recorded.
2. Confirm that the picture doesn't have an overmodulation.
3. If it is, readjust the Y PB EQ (Section 4-12) and Y WFM CHARACTERISTIC (Section 4-13) Adjustments.

4-24. C OVERMODULATION CONFIRMATION

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
C DUB OUT (W/75 ohm Termination)	SELF REC/PB REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	MONITOR TV	COMPONENT 100% H. SWEEP (TSG-300) FOR AU-520S (TSG-130) FOR AU-520	-------------

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

1. C DUB OUT to Video In of Monitor.
   Y DUB OUT to Sync In of Monitor.
2. Confirm that the picture doesn't have an overmodulation.
3. If itis, turn VR18 and VR19 to clcockwise 0.5 frame.
4. After that readjust VR17 and VR21 as Section 4-17.

Note : Set the monitor to EXT for SYNC.

4-25. Y DOC LEVEL ADJUSTMENT

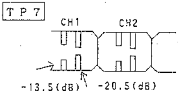
(VIDEO 2)

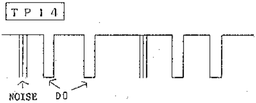
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP7 TP14	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE D.O.C. COLOUR BAR	OSCILLO SCOPE	----------	VR31 (Y DOC DET.)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

SCOPE CH1 : TP7
SCOPE CH2 : TP14





-20.5dB portion noise : just disappeared

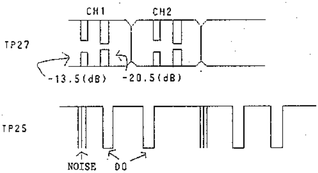
Step 2.

1. Place the unit in the SEARCH mode, confirm that the search picture appears on the monitor without big black bar.

4-26. C DOC LEVEL ADJUSTMENT

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP27 TP25	PLAY BACK	☐ BLANK TAPE	OSCILLO SCOPE	----------	VR30 (C DOC DET.)
		■ ALIGNMENT TAPE D.O.C. COLOUR BAR			

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. SCOPE CH1 : TP27 SCOPE CH2 : TP25	 CH1 CH2 TP27 -13.5(dB) -20.5(dB) TP25 NOISE DO -20.5dB portion noise : just disappeared

4-27. Y LIMITER BALANCE ADJUSTMENT

(VIDEO 2)

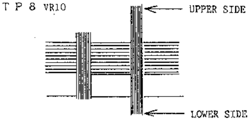
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP8	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE D.O.C. COLOUR BAR	OSCILLO SCOPE	-----------	VR30 (C DOC DET.)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

SCOPE CH1 : TP8

Adjust VR10 so that there is a noise at upper side and lower side.



4-28. SYNC TIP CARRIER BALANCE ADJUSTMENT

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
Y DUB OUT (W/75ohm Termination)	SELF REC/PLAY REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VR11 (Y DEMOD BAL)

ADJUSTMENT PROCEDURE & SPECIFICATION

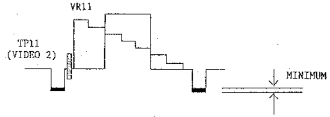
Step 1.
MACHINE CONDITION

INPUT SELECT : COMPOSITE (LINE)

Step 2.

SCOPE : Y DUB OUT
(W/75 ohm Termination)

CARRIER BALANCE : MINIMUM



4-29. C CARRIER BALANCE ADJUSTMENT

(VIDEO 2)

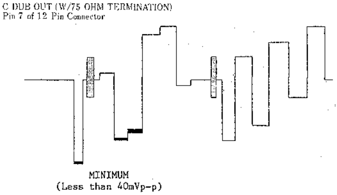
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
C DUB OUT (W/75ohm Termination)	SELF REC/PLAY REC	BLANK ■ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPOSITE COLOUR BAR	VR24 (C LIM BAL) VR25 (C DEMOD BAL)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

SCOPE : C DUB OUT
(W/75 ohm Termination)

1. After make a recording, playback the portion just recorded.
2. Adjust VR24 and VR25 so that the carrier balance is minimized. (Less than 40mVp-p)


C DUB OUT (W/75 OHM TERMINATION)
Pin 7 of 12 Pin Connector
MINIMUM
(Less than 40mVp-p)

4-30. C CARRIER BALANCE CONFIRMATION

(VIDEO 2)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP23	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	-----------

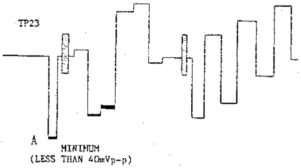
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. (CONFIRMATION)

SCOPE : TP23

Confirm that the carrier balance of sync top os A (± 10mVp-p)

A = The adjusted value at Section 4-29.


TP23
A
MINIMUM
(LESS THAN 40mVp-p)

4-31. TRACKING METER LEVEL ADJUSTMENT (VIDEO 2)

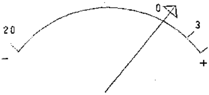
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TRACKING METER	SELF REC/PLAY	BLANK ■ TAPE ALIGNMENT ☐ TAPE	---------	COMPOSITE 100% COLOUR BAR	VR9 (TRACK LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

1. Recording : COMPOSITE COLOUR BAR
PLAY : The portion just recorded
TRACKING : MAX

2. METER : "0"

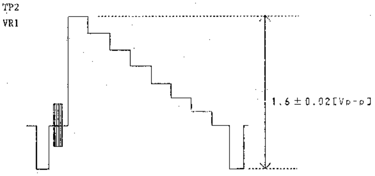


< VIDEO 3,4 SECTION >

5-1. Y INPUT LEVEL ADJUSTMENT

(VIDEO 4)

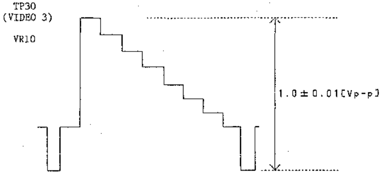
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP2	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	---------------	VR1 (Y INPUT LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	TRACKING : MAX
Step 2. SCOPE : TP2	

5-2. 2H DELAY OUTPUT LEVEL ADJUSTMENT

(VIDEO 4)

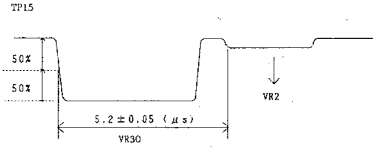
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP30 (VIDEO 3)	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	--------------	VR10 (2H DL OUT LEV.) (VIDEO 4)

ADJUSTMENT PROCEDURE & SPECIFICATION	
STEP 1. MACHINE CONDITION	TRACKING : MAX
STEP 2. SCOPE : TP30 (VIDEO 3)	

5-3. PEDESTAL BLANKING POSITION ADJUSTMENT

(VIDEO 4)

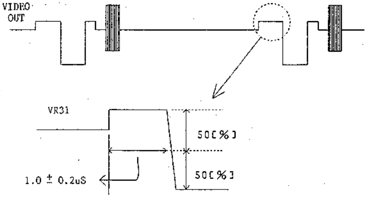
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP15	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 0 IRE PEDESTAL SIGNAL	VR2 (Y. CP) VR30 (B BLK SP)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. SCOPE : TP15 PEDESTAL BLANKING LEVEL : Just a little down against the signal level.	

5-4. VISC BLANKING WIDTH ADJUSTMENT

(VIDEO 4)

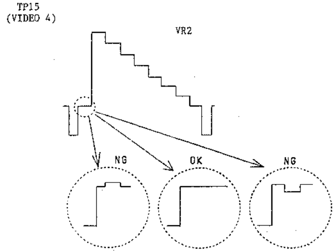
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT	FULL E-E	☐ BLANK TAPE ■ ALIGNMENT TAPE	WAVEFORM MONITOR	COMPOSITE 0 IRE PEDESTAL SIGNAL	VR31 (V. BLK W)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. 1. WAVEFORM LINE SELECTOR 2. SW501 and SW502	DIGITAL (12 Line) Number 12 bit : ON The other one : OFF
Step 3. SCOPE : VIDEO 1 OUT	
Step 4. After finish this adjustment, put the jumper switch (SW501/502) to the original position. (12th Line of V, BLK should be blanked.)	

5-5. Y CLAMP VOLTAGE ADJUSTMENT

(VIDEO 4)

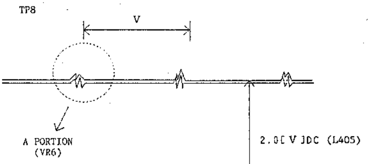
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP15	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	--------------	VR2 (Y CP)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. SCOPE : TP15	

5-6. Y PLL ADJUSTMENT

(VIDEO 4)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP8	FULL E-E	☐ BLANK TAPE ■ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR6 (Y PLL POS) L405 (Y PLL DC)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE
Step 2. SCOPE : TP8	 A portion is as flat as possible.

5-7. VIDEO OUTPUT LEVEL ADJUSTMENT

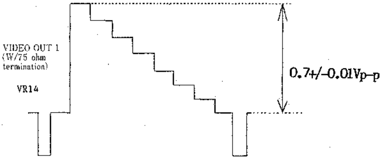
(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT (W/75ohm termination)	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	---------------	VR14 (VIDEO OUT LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

SCOPE : VIDEO 1 OUT
(W/75ohm termination)


VIDEO OUT 1
(W/75 ohm termination)
VR14
0.7+/-0.01Vp-p

5-8. C INPUT LEVEL ADJUSTMENT

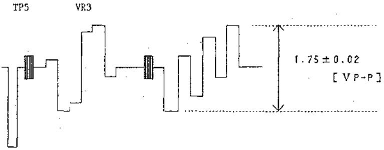
(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP5	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	---------------	VR3 (C. INPUT LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

SCOPE : TP5


TP5
VR3
1.75 ± 0.02
[VP-P]

5-9. C CLAMP VOLTAGE ADJUSTMENT

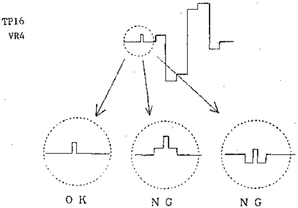
(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP16	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	---------------	VR4 (C. CP)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

SCOPE : TP16



5-10. CARRIER BALANCE ADJUSTMENT

(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	VECTOR SCOPE	---------------	VR4 (C. CP) VR12 (R-Y BLK LEV.) VR17 (B-Y BLK LEV.)

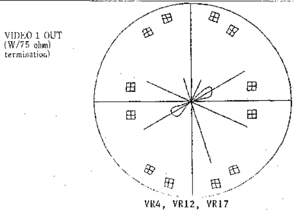
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

VECTOR SCOPE : VIDEO 1 OUT
(W/75ohm Termination)

VECTOR SCOPE : MAX GAIN

DOT : Centre of Vector Scope



5-11. C PLL ADJUSTMENT

(VIDEO 3)

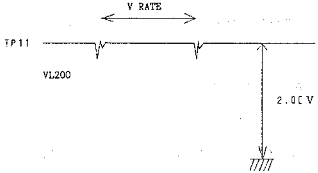
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP11	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	--------------	VL200 (C. PLL DC)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

SCOPE : TP11

PLL Lock Voltage : 2.0V (DC)



5-12. PREPARATION FOR ENCODER ADJUSTMENT

(VIDEO 3, 4)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
		BLANK ☐ TAPE ALIGNMENT ☐ TAPE			

ADJUSTMENT PROCEDURE & SPECIFICATION

Note:

1. To adjust the Encoder Section (From Section 5-12) The Section 5-1 ~ 5-11 should be completed.	
2. SW1 and 2.	Insert to A side
3. EXT TBC SW	OFF

5-13. X'TAL FREQUENCY ADJUSTMENT

(VIDEO 3)

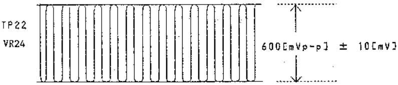
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP32	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	FREQUENCY COUNTER	---------	VC401 (4.43MHz)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO SECTION 5-12
Step 2. FREQUENCY COUNTER : TP32	TP32 = 4.433619MHz (+/- 20Hz)

5-14. SUB CARRIER LEVEL ADJUSTMENT

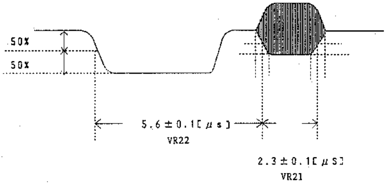
(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP22	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	------------	VR24 (CARR LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12
Step 2. SCOPE : TP22 SC LEVEL : 600mVp-p SCOPE : TP22 (+/- 10mV) Confirm the X'TAL FREQUENCY ADJ. (5-13)	

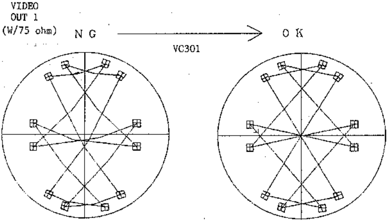
5-15. BURST POSITION AND WIDTH ADJUSTMENT

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT (W/75ohm Termination)	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	--------------	VR21 (B. WIDTH) VR22 (B. POS)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12
Step 2. SCOPE : VIDEO 1 OUT (W/750ohm Termination)	 50% 50% 5.6 ± 0.1[μs] VR22 2.3 ± 0.1[μS] VR21

5-16. VECTOR PHASE DISTORTION ADJUSTMENT

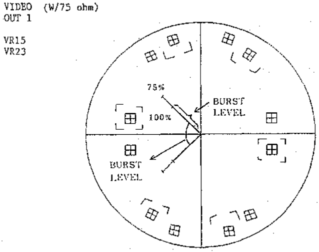
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT (W/75ohm Termination)	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	VECTOR SCOPE	-----------	VC301 (PHASE DISTORTION)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12
Step 2. VECTOR SCOPE : VIDEO 1 OUT (W/75ohm Termination)	

5-17. BURST PHASE AND LEVEL ADJUSTMENT

(VIDEO 3)

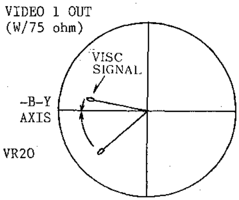
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT (W/75ohm Termination)	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	VECTOR SCOPE	-----------	VR15 (B. PHASE) VR23 (B. LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12
Step 2. VECTOR SCOPE : VIDEO 1 OUT (W/75ohm Termination)	 VIDEO (W/75 ohm) OUT 1 VR15 VR23 75% 100% BURST LEVEL BURST LEVEL

5-18. E-E SUB CARRIER SCH ADJUSTMENT

(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT (W/75ohm Termination)	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	VECTOR SCOPE	COMPOSITE 100% COLOUR BAR	VR20 (E-E SCH)

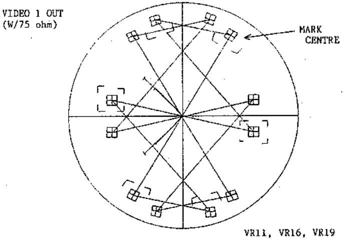
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12 INPUT SELECT : COMPOSITE (LINE)
Step 2. 1. VECTOR SCOPE : VIDEO 1 OUT (W/75ohm Termination) 2. SW501 (VIDEO 4) : "ALL OFF" to observe the SCH signal on the VIDEO 1 OUT. 3. If the VISC is not located near the -B-Y AXIS, change the position of SW301 on Decoder. 4. Repeat item 2. 5. Finally set the SW501 (12th Line) to the "ON" position to blank the 12th line.	 VIDEO 1 OUT (W/75 ohm) VISC SIGNAL -B-Y AXIS VR20

5-19. COLOUR PHASE AND LEVEL ADJUSTMENT

(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT (W/75ohm Termination)	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	VECTOR SCOPE	-----------	VR11 (R-Y LEVEL) VR16 (B-Y LEVEL) VR19 (QUAD)

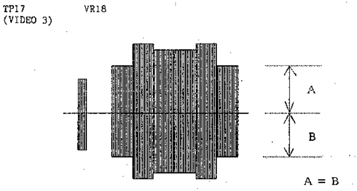
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12.
Step 2. VECTOR SCOPE : VIDEO 1 OUT (W/75ohm Termination)	 VIDEO 1 OUT (W/75 ohm) MARK CENTRE VR11, VR16, VR19

5-20. B-Y BALANCE ADJUSTMENT

(VIDEO 3)

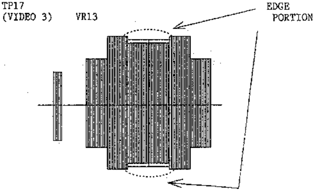
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP17	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	-----------	VR18 (B-Y BAL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12.
Step 2. SCOPE : TP17	 TP17 (VIDEO 3) VR18 A B A = B

5-21. R-Y BALANCE ADJUSTMENT

(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP17	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE	-----------	VR13 (R-Y BAL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12.
Step 2. SCOPE : TP17 Adjust VR13 so that the edge portion of the signal has the most overlap.	

5-22. VIDEO 2 OUT LEVEL AND VECTOR CONFIRMATION

(VIDEO 3)

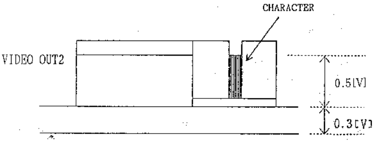
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 2 OUT (W/75ohm Termination)	PLAY	☐ BLANK TAPE ■ ALIGNMENT TAPE 100% COLOUR BAR	OSCILLO SCOPE VECTOR SCOPE	-----------	---------------

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 7-12.
Step 2. (CONFIRMATION) SCOPE : VIDEO 2 OUT (W/75ohm Termination)	VIDEO LEVEL : 1.0Vp-p CHROMA LEVEL : CORRECT PHASE and LEVEL (As same as VIDEO 1 OUT)

5-23. CHARACTER GAIN LEVEL ADJUSTMENT

(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 2 OUT (W/75ohm Termination)	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 100% COLOUR BAR	OSCILLO SCOPE	---------	VR25 (VOW LEVEL)

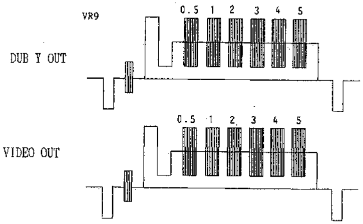
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12.
Step 2. SCOPE : VIDEO 2 OUT (W/75ohm Termination) Adjust VR25 so that the character level is same as Y white level (0.5V from pedestal)	

5-24. Y FREQUENCY RESPONSE ADJUSTMENT

(VIDEO 4)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
DUB Y OUT VIDEO OUT	FULL E-E	BLANK ■ TAPE ALIGNMENT ☐ TAPE	WAVEFORM MONITOR	COMPONENT MULTI·BURST	VR9 (EQ)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	REFER TO THE SECTION 5-12 INPUT SELECT : COMPONENT
Step 2. WFM CH A : DUB Y OUT WFM CH B : VIDEO OUT 1. Adjust VR9 so that the frequency response of VIDEO OUT equalize to DUB Y OUT. 2. Playback the portion just recorded, adjust VR9 so that the frequency response of VIDEO 4 TP1 equalize.	 VR9 DUB Y OUT 0.5 1 2 3 4 5 VIDEO OUT 0.5 1 2 3 4 5

5-25. VISC BLANKING CONFIRMATION

(VIDEO 3, 4)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT (W/75ohm Termination)	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	WAVEFORM MONITOR	COMPOSITE COLOUR BAR	SW501 SW502

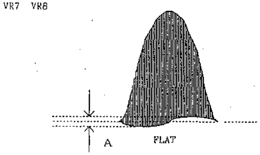
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. 1. WFM : VIDEO OUT (W/75ohm Termination) 2. Confirm that the initial V. blanking (7H ~ 22H) is possible to change when the SW501 and SW502 are changed. 3. After confirm the below item, set the SW501 (12th Line) to "ON" position. (The other one should "OFF").	

5-26. Y/C TIMING ADJUSTMENT

(VIDEO 3)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT (W/75ohm Termination)	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE 20T PULSE	WAVEFORM MONITOR	---------	VR7 (Y/C TIM) VR8 (C. PLL POS)

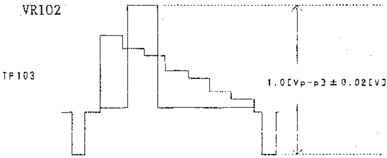
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO SECTION 5-12.
Step 2. WFM : VIDEO 1 OUT (W/75ohm Termination) 1. Adjust VR8 so that the A portion is flat with extender board. 2. Adjust VR7 so that the A portion is flat without extender board.	

< DECODER SECTION >

6-1. COMPONENT Y/C Y LEVEL ADJUSTMENT

(DECODER)

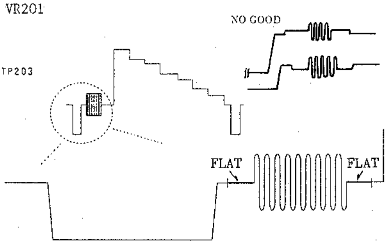
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP103	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR102 (COMPONENT/YC Y LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE : TP103	

6-2. Y PEDESTAL BLANKING ADJUSTMENT

(DECODER)

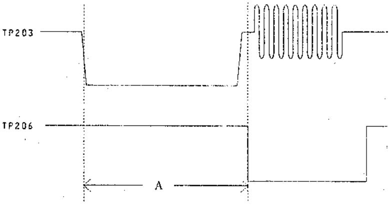
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR201 (Y BLK LEV)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE : TP203	

6-3. Y PEDESTAL BLANKING POSITION ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203 TP206	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR203 (Y BLK POS)

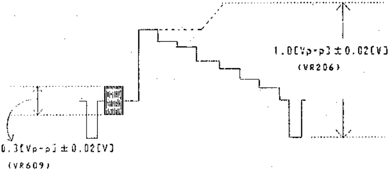
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPIT SELECT : COMPONENT
Step 2. SCOPE CH1 : TP203 SCOPE CH2 : TP206	VR203  A = 5.0usec $^{+0.1}_{-0}$

6-4. DECODER Y LEVEL ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR206 (DEC Y LEV) VR609 (Y BURST LEV)

ADJUSTMENT PROCEDURE & SPECIFICATION

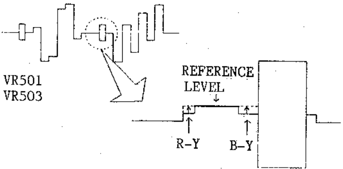
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE : TP203	TP203 VR206 VR609  1.0[Vp-p]±0.02[V] (VR206) 0.3[Vp-p]±0.02[V] (VR609)

6-5. CTCM BLANKING LEVEL ADJUSTMENT

(DECODER)

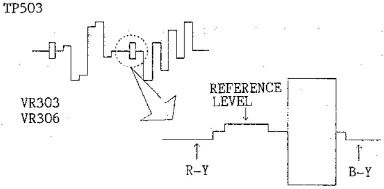
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP503	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR501 (R-Y DC LEV) VR503 (B-Y DC LEV)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE RANGE : 20mV/DIV SCOPE : TP503	TP503  VR501 VR503 REFERENCE LEVEL R-Y B-Y REFERENCE LEVEL = R-Y BLK LEVEL = B-Y BLK LEVEL

6-6. R-Y/B-Y BLANKING LEVEL ADJUSTMENT (DECODER)

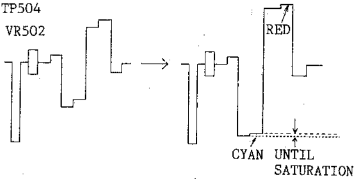
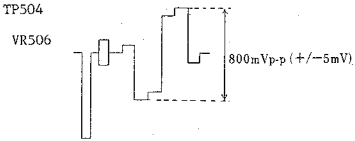
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP503	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR303 (R-Y BLK LEV.) VR306 (B-Y BLK LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE RANGE : 20mV/DIV SCOPE : TP503	 REFERENCE LEVEL = R-Y BLK LEVEL B-Y BLK LEVEL

6-7. R-Y A/D LEVEL (1) ADJUSTMENT

(DECODER)

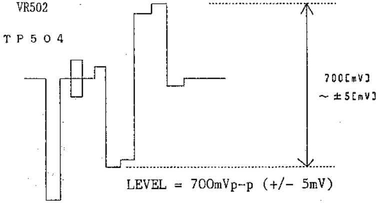
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP504	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR502 (R-Y A/D LEV.) VR506 (CTCM LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE : TP504	 TP504 VR502 RED CYAN UNTIL SATURATION
Step 3. SCOPE : TP506	 TP504 VR506 800mVp-p (+/−5mV)

6-8. R-Y A/D LEVEL (2) ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP504	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR502 (R-Y A/D LEV.)

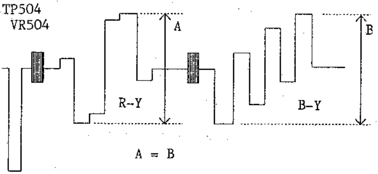
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. (CONFIRMATION) SCOPE : TP504	R-Y LEVEL = 1.65Vp-p
Step 3. SCOPE : TP504	 LEVEL = 700mVp-p (+/- 5mV)

6-9. B-Y A/D LEVEL ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP504	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR504 (B-Y A/D LEV.)

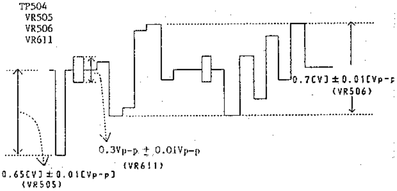
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE : TP504	 A = B

6-10. CTCM LEVEL ADJUSTMENT

(DECODER)

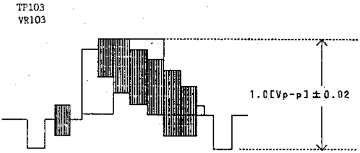
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP504	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR505 (C SYNC LEV.) VR506 (CTCM LEV.) VR611 (C BURST LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE : TP504	

6-11. AGC LEVEL ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP103	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VR103 (AGC LEV.)

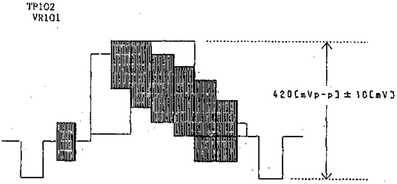
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE) VIDEO LEVEL : DETENT POSITION
Step 2. SCOPE : TP103	

6-12. AGC GAIN ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP102	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VR101 (AGC GAIN)

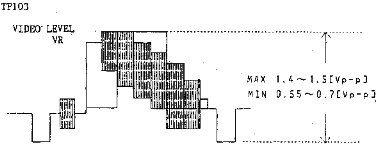
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE) VIDEO LEVEL : DETENT POSITION
Step 2. SCOPE : TP102	 TP102 VR101 420[mVp-p] ± 10[mV]

6-13. VIDEO LEVEL VR CONFIRMATION

(DECODER)

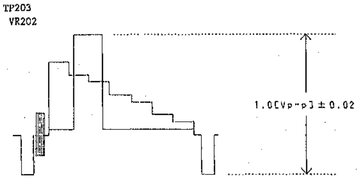
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP103	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VIDEO LEVEL VR

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. (CONFIRMATION) SCOPE : TP103 Confirm that video level should be changed 1.4 ~ 1.5Vp-p (MAX) to 0.55 ~ 0.7Vp-p (MIN).	 TP103 VIDEO LEVEL VR MAX 1.4～1.5[Vp-p] MIN 0.55～0.7[Vp-p]

6-14. COMPOSITE Y LEVEL ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VR202 (COMPOSITE Y LEV.)

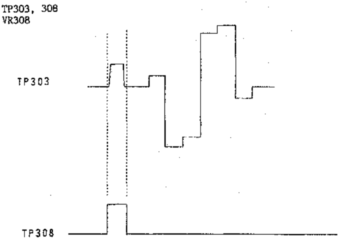
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. SCOPE : TP203	

6-15. BURST GATE POSITION ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP303 TP308	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VR308 (BURST G POS.)

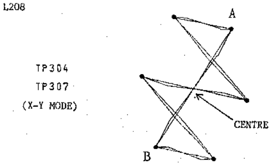
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. SCOPE CH1 : TP303 SCOPE CH2 : TP308	 TP303, 308 VR308 TP303 TP308

6-16. B.P.F. PEAK ADJUSTMENT

(DECODER)

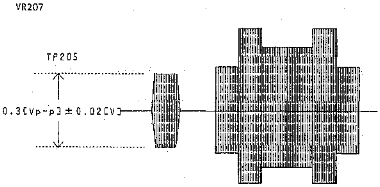
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP304 TP307	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	L208 (BPF PEAK)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. SCOPE CH1 : TP307 SCOPE CH2 : TP304 SCOPE MODE : X - Y 1. Adjust L208 so that the line between A and B through the centre position.	 L208 TP304 TP307 (X-Y MODE) A CENTRE B

6-17. COMPOSITE CHROMINANCE LEVEL ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP205	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE SCOPE	COMPOSITE 100% COLOUR BAR	VR207 (COMPOSITE C LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. SCOPE : TP205	

6-18. CARRIER BALANCE ADJUSTMENT

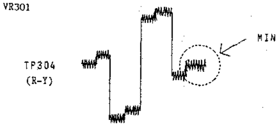
(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP304 TP307	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VR301 (R-Y CARR BAL) VR304 (B-Y CARR BAL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)

Step 2.

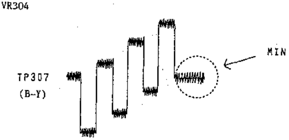
SCOPE : TP304


VR301
TP304
(R-Y)
MIN

CARRIER LEAKAGE : MINIMUM

Step 3.

SCOPE : TP307


VR304
TP307
(B-Y)
MIN

CARRIER LEAKAGE : MINIMUM

6-19. AXIS PHASE ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP504	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VR307 (AXIS PHASE)

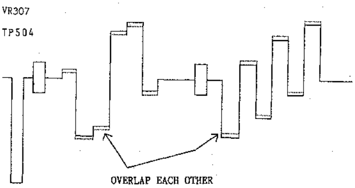
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION

INPUT SELECT : COMPOSITE (LINE)

Step 2.

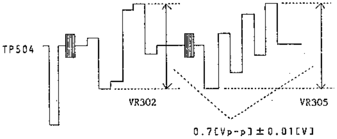
SCOPE : TP504


VR307
TP504
OVERLAP EACH OTHER

6-20. COMPOSITE CTCM LEVEL ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP504	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VR302 (DEC R-Y LEV.) VR305 (DEC B-Y LEV.)

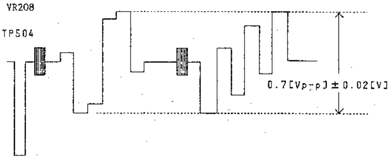
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. SCOPE : TP504	
SteP 3. Confirm the AXIS Phase Adjustment (6-22), if it is not readjust it. Repeat step 2 of 4-20.	

6-21. Y/C CHROMINANCE LEVEL ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP504	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	Y/C 100% COLOUR BAR (CAMERA which has Y/C output)	VR208 (YC C LEV.)

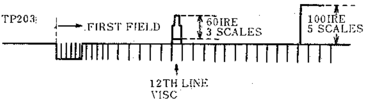
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	INPUT SELECT : YC
Step 2. SCOPE : TP504	 VR208 TP504 0.7[Vp-p]±0.02[V]

6-22. VISC LEVEL ADJUSTMENT

(DECODER)

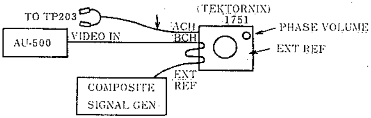
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPOSITE 100% COLOUR BAR	VR204 (VISC LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. 1. Set the scope level so that the video level is 5 scales. 2. Adjust VR204 so that the VISC level is 3 scales.	 TP203 FIRST FIELD 60IRE 3 SCALES 100IRE 5 SCALES 12TH LINE VISC Y LEVEL : VISC LEVEL = 5 SCALES : 3 SCALES

6-23. VISC PHASE ADJUSTMENT

(DECODER)

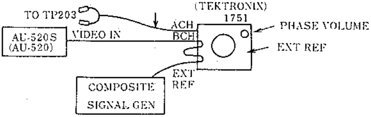
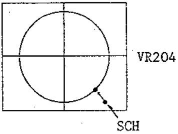
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	WAVEFORM MONITOR (SCH METER) (1751 TEKTRONIX)	COMPOSITE 100% COLOUR BAR	VR205 (VISC PHASE) SW303 SW304

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. Set the equipments as shown in right side.	 TO TP203 AU-500 VIDEO IN (TEKTORNIX) 1751 ACH BCH PHASE VOLUME EXT REF EXT REF COMPOSITE SIGNAL GEN
Step 3. 1. Set the 1751 to the SCH mode. 2. Set the CHB and adjust the Phase volume on 1751 so that the SCH is match to -B-Y Axis. 3. Change to CHA and memorize the SCH position.	
Step 4. 1. Set the VECTOR mode at 1751 (TEKTRONIX). 2. Adjust the Phase Volume on 1751 so that the burst signal of CHB matches to correct burst position. 3. Change to CHA. 4. Adjust VR205 so that the VISC phase is same as step 3-3. 5. If it can not be adjusted, change the position of SW303 and SW304. 6. Repeat Step 4-4.	

6-24. VISC LEVEL READJUSTMENT

(DECODER)

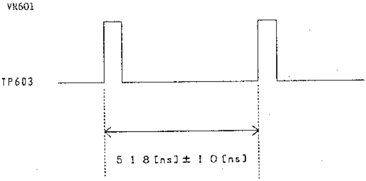
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	WAVEFORM MONITOR (SCH METER) (1751 TEKTRONIX)	COMPOSITE 100% COLOUR BAR	VR204 (VISC LEV.)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. Set the equipment as shown in right side.	 TO TP203 (TEKTRONIX) 1751 ACH BCH PHASE VOLUME EXT REF AU-520S (AU-520) VIDEO IN EXT REF COMPOSITE SIGNAL GEN
Step 3. WAVEFORM MONITOR : TP203 (1751) VISC LEVEL = SCALE OF 1751	1751 (WAVEFORM MONITOR) 
Step 4. 1. Confirm the VISC PHASE (6-23), if it is not, readjust it. 2. Repeat Step 3 of 6-24 until the phase and level can get correct specification at the same time.	

6-25. PLL FREQUENCY ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP603	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR601 (VCO FREQ)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE : TP603	

6-26. Y/C TIMING ADJUSTMENT (COMPONENT)

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT	PLAY & SELF REC/PLAY	BLANK ■ TAPE ALIGNMENT ■ TAPE MODULATED 20T PULSE	WAVEFORM MONITOR	COMPONENT MODULATED 2T SIGNAL	VR604 (COMPONENT Y/C TIM)

ADJUSTMENT PROCEDURE & SPECIFICATION

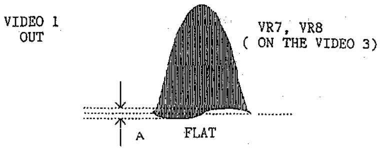
Step 1.

MACHINE CONDITION

INPUT SELECT : COMPONENT

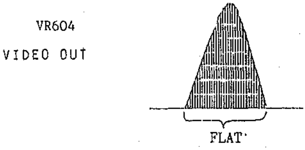
Step 2.

1. Play back the 20T Pulse portion of the Alignment Tape.
2. Confirm that the Y/C Timing is correct. If it is not, readjust VR7 and VR8 on VIDEO 3.



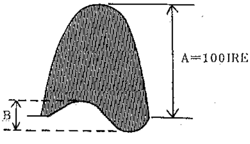
Step 3.

1. Record the modulated 20T signal.
2. Playback the portion just recorded.
3. Adjust VR604 so that the Y/C Timing is less than 20nsec.



INFORMATION

How to measure the Y/C Timing at modulated 20T signal.

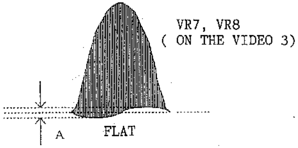
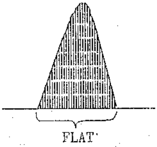
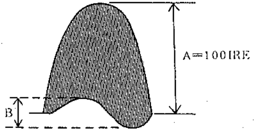


$1.27\times\frac{A}{B}\fallingdotseq X\ \mu SEC$

6-27. Y/C TIMING ADJUSTMENT (COMPOSITE)

(DECODER)

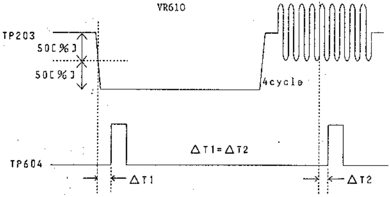
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO 1 OUT	PLAY & SELF REC/PLAY	BLANK ■ TAPE ALIGNMENT ■ TAPE	WAVEFORM MONITOR	COMPOSITE MODULATED 2T SIGNAL	VR602 (COMPOSITE Y/C TIM)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. 1. Play back the 20T Pulse portion of the Alignment Tape. 2. Confirm that the Y/C Timing is correct. If it is not, readjust VR7 and VR8 on the VIDEO 3.	VIDEO 1 OUT 
Step 3. 1. Record the modulated 20T signal. 2. Play back the portion just recorded. 3. Adjust VR602 so that the Y/C Timing is correct.	VR604 VIDEO OUT 
INFORMATION How to measure the Y/C Timing at modulated 20T signal.	 $1.27\times\frac{A}{B}\fallingdotseq X\ \mu\mathrm{SEC}$

6-28. COMPONENT Y BURST POSITION ADJUSTMENT

(DECODER)

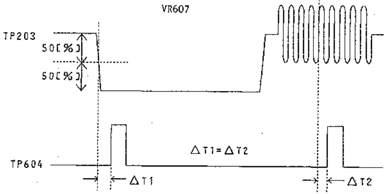
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203 TP604	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR610 (COMPONENT Y BURST POS.) SW603

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : YC
Step 2. SCOPE CH1 : TP203 SCOPE CH2 : TP604	
Step 3. 1. If it can'not be adjusted, change the position of SW603 to the other side. 2. Repeat the step 2.	

6-29. COMPOSITE Y BURST POSITION ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203 TP604	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPOSITE 75% COLOUR BAR	VR607 (COMPOSITE Y BURST POS.) SW601

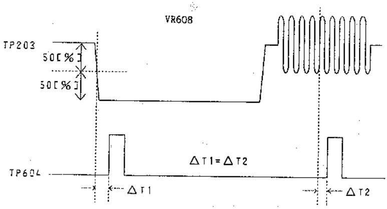
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE CH1 : TP203 SCOPE CH2 : TP604	 VR607 TP203 50[%] 50[%] ΔT1=ΔT2 TP604 ΔT1 ΔT2
Step 3. 1. If it can not be adjusted, change the position of SW601 to the other side. 2. Repeat the step 2.	

6-30. Y/C Y BURST POSITION ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203 TP604	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	YC COLOUR BAR (CAMERA which has YC output)	VR608 (YC Y BURST POS.)

ADJUSTMENT PROCEDURE & SPECIFICATION

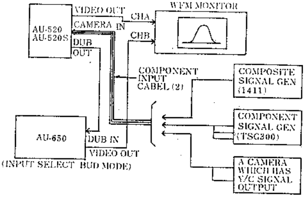
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE
Step 2. SCOPE CH1 : TP203 SCOPE CH2 : TP604	

VR608
TP203
50[%]
50[%]
TP604
ΔT1=ΔT2
ΔT1
ΔT2

6-31. PREPARATION FOR THE Y/C TIMING ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
----------	------	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	WAVEFORM MONITOR	COMPONENT COMPOSITE YC	-----------

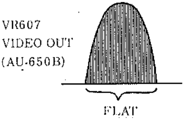
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MEASURING CONDITION	1. The adjustment of VIDEO 1, 2, 3 and 4 circuit should be completed. 2. The Playback Y/C Timing of AU-650B shoud be completed by the alignment Tape.
Step 2. 1. Prepare the equipment as shown right side.	

AU-520
AU-520S
VIDEO OUT
CAMERA IN
DUB OUT
CHA
CHB
WFM MONITOR
COMPONENT INPUT CABEL (2)
COMPOSITE SIGNAL GEN (1411)
COMPONENT SIGNAL GEN (TSG300)
A CAMERA WHICH HAS Y/C SIGNAL OUTPUT
AU-650
DUB IN
VIDEO OUT
(INPUT SELECT BUD MODE)

6-32. Y/C TIMING ADJUSTMENT W/AU-650B (COMPOSITE)

(DECODER)

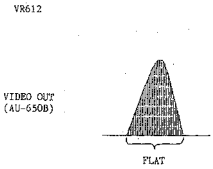
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO OUT OF AU-650B	REC ↓ PLAY (AU-650B)	■ BLANK TAPE ☐ ALIGNMENT TAPE	WAVEFORM MONITOR	COMPOSITE MODULATED	VR607 (COMPOSITE Y BURST PHASE)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MEASURING CONDITION	INPUT SELECT : COMPOSITE (LINE) The Y/C TIMING ADJ. (COMPOSITE) (6-27) should be completed.
Step 2. 1. Recording : Modulated 20T Signal at AU-520/AU-520S. 2. Play : At AU-650B 3. Confirm the Y/C Timing. 4. If it is not, readjust VR607. 5. Repeat item 1 ~ 4 until the Y/C timing is correct (flat).	

6-33. Y/C TIMING ADJUSTMENT W/AU-650B (COMPOSITE INPUT)

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO OUT OF AU-650B	REC ↓ PLAY (AU-650B)	BLANK ■ TAPE ALIGNMENT ☐ TAPE	WAVEFORM MONITOR	COMPOSITTE MODULATED 2T PULSE SIGNAL	VR612 (C BURST PHASE)

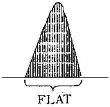
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE The Section 4-32 should be completed.
Step 2. 1. Recording : Modulated 2T Pulse Signal at AU-520,AU-520S 2. Playback : At AU-650B 3. Confirm the Y/C Timing. 4. NG : Adjust VR612. 5. Repeat item 1 ~ 3.	
Step 3. 1. If it can not be adjusted, change the SW604 to the other side. 2. Repeat the step 2.	

6-34. Y/C TIMING ADJUSTMENT W/AU-650B (COMPONENT)

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO OUT OF AU-650B	REC ↓ PLAY (AU-650B)	■ BLANK TAPE ☐ ALIGNMENT TAPE	WAVEFORM MONITOR	COMPONENT MODULATED 20T SIGNAL	VR610 (COMPONENT Y BURST PHASE)

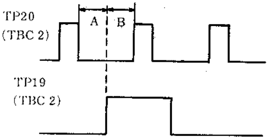
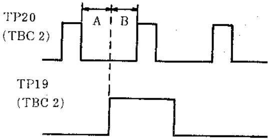
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT The Section 4-26 and 4-33 should be completed.
Step 2. 1. Recording : Modulated 20T signal at AU-520,AU-520S. 2. Playback : At AU-650B. 3. Confirm the Y/C Timing. 4. If it is not correct, readjust VR610. 5. Repeat item 1 ~ 4 until the Y/C timing is correct (flat).	VR610 VIDEO OUT (AU-650B) 
Step 3. (NOTE) 1. Confirm that the COMPONENT Y BURST POSITION ADJ. (4-28) is in the following specification. $\lvert T1 - T2 \rvert \leq 30$nsec. 2. If it is not, readjust the Y/C TIMING ADJ. (COMPONENT) (6-26). 3. Confirm the STEP 2 and 3.	

6-35. Y/C TIMING ADJUSTMENT W/AU-650B (Y/C INPUT)

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP19/TP20 ON TBC 2 OF AU-650B & VIDEO OUT OF AU-650B	REC ↓ PLAY (AU-650B)	■ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE & WAVEFORM MONITOR	COMPOSITE COLOUR BAR & YC COLOUR BAR	VR603 (YC YC TIMING) VR608 (YC Y BURST PHASE)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE) Y/C TIMING ADJ (4-32 and 4-33) should be completed.
Step 2. 1. Record the Composite Colour Bar Signal for a few minutes. 2. Playback the portion just recorded at AU-650B. 3. SCOPE CH1 : TP19 (TBC2 AU-650B) SCOPE CH2 : TP20 (TBC2 AU-650B) 4. Memorize the Y Burst Gate Pulse position.	 A=B±10%
Step 3. 1. Record the YC Colour Bar Signal for a few minutes. 2. Playback the portion just recorded at AU-650B. 3. SCOPE CH1 : TP19 (TBC2 AU-650B) SCOPE CH1 : TP20 (TBC2 AU-650B) 4. Confirm that the Y Burst Gate Pulse position is same as composite input condition. (Step 2 Item 4). 5. If it is not, adjust VR603 and repeat STEP 3 until the Gate Pulse is same as step 2 item 4.	 A=B±10%
Step 4. 1. Supply the Component 100% Colour Bar Signal to AU-650B directry. 2. Memorize the position of the Y/C Timing.	

Step 5.

1. Record the YC colour bar for a few minutes at AU-520, AU-520S.

2. Playback the portion just recorded by AU-520, AU-520S.

3. Place the until in the E-E mode of AU-650B.

4. Confirm that the Y/C timing of component output of AU-650B is less than 20nsec against the memorized position.

5. If it is not, adjust VR608.

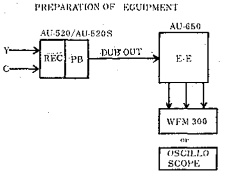
6. Repeat the STEP 4.

In Case of WFM300 : Figure 2.

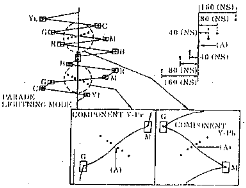
In Case of Oscilloscope : Figure 3, 4

SPECIFICATION : Less than 10nsec

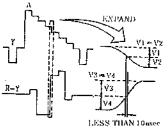
1


PREPARATION OF EGUIPMENT
AU-520/AU-520S
AU-650
Y
C
REC
PB
DUB OUT
E-E
WFM 300
or
OSCILLO SCOPE

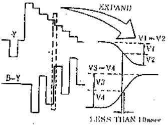
2


Y1
C
G
M
R
B
B
R
G
M
C
Y1
PARADE LIGHTNING MODE
COMPONENT Y-Pr
G
M
(A)
COMPONENT Y-Pb
G
M
(A)
160 (NS)
80 (NS)
40 (NS)
(A)
40 (NS)
80 (NS)
160 (NS)

3


A
EXPAND
Y
V1=V2
V1
V2
R-Y
V3=V4
V3
V4
LESS THAN 10nsec

4

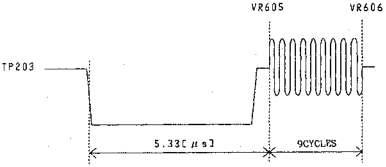

EXPAND
Y
V1=V2
V1
V2
B-Y
V3=V4
V3
V4
LESS THAN 10nsec

6-36. Y BURST GATE POSITION & WIDTH ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP203	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR605 (Y BURST POS) VR606 (Y BURST POS)

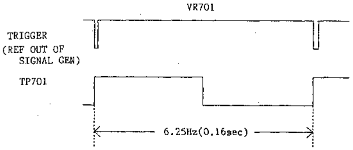
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT
Step 2. SCOPE : TP203	 VR605 VR606 TP203 5.33[μs] 9CYCLES

6-37. VIDEO CF ADJUSTMENT

(DECODER)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP701 FIELD REF. OUT (TRIGGER) (Signal Gen)	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 75% COLOUR BAR	VR701 (CF PULSE)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	INPUT SELECT : COMPOSITE (LINE)
Step 2. SCOPE CH1 : Field Reference signal from Signal Gen SCOPE CH2 : TP701	 VR701 TRIGGER (REF OUT OF SIGNAL GEN) TP701 6.25Hz(0.16sec)
Step 3. (CONFIRMATION) Confirm that the no signal at TP701, when the AUTO/NSTD switch set to the NSTD side.	

< VIDEO 1 SECTION >

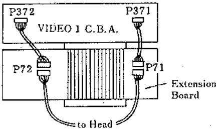
7-1. PREPARATION OF VIDEO 1 ADJUSTMENT

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
---------	------	☐ BLANK TAPE ☐ ALIGNMENT TAPE	---------	-----------	-------------

ADJUSTMENT PROCEDURE & SPECIFICATION.

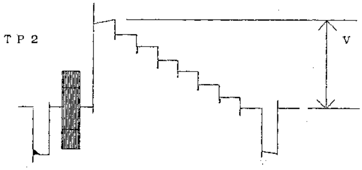
PREPARATION

1. The extension board is neccessary to adjust the VIDEO 1 section.
2. The connection is as shown in right side.


P372
P371
VIDEO 1 C.B.A.
P72
P71
Extension Board
to Head

7-2. Y NON-LENEAR LEVEL ADJUSTMENT

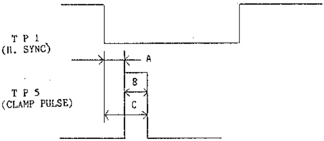
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP2	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR30 (Y NL LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO SECTION 5-1. INPUT SELECT : COMPONENT
Step 2. SCOPE : TP2	VR30 V = 1.1 ± 0.01 (Vp-p) 

7-3. Y CLAMP PULSE CONFIRMATION

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP1 TP5	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	-------------

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO SECTION 7-1. INPUT SELECT : COMPONENT
Step 2. SCOPE CH1 : TP1 SCOPE CH2 : TP5 1. Confirm that the relationship of H SYNC and CLAMP PULSE are shown right side.	 A = 1.0 ± 0.1 US B = 1.0 ± 0.1 US C = LESS THAN 2.2 US

7-4. Y DEVIATION ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP4 (VIDEO 1) TP7 (VIDEO 2) TP11 (VIDEO 2)	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR5 (Y DARK CLIP) (VIDEO 1) VR7 (Y WHITE CLIP) (VIDEO 1) VR6 (Y MOD BAL) (VIDEO 1) VR3 (Y DEV) (VIDEO 2) VR4 (Y FREQ) (VIDEO 2)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.
MACHINE CONDITION

REFER TO SECTION 7-1.
INPUT SELECT : COMPONENT

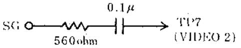
Step 2.

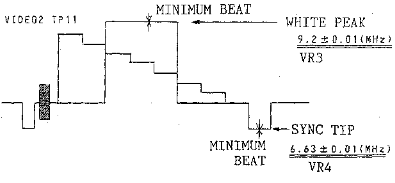
SCOPE : TP4 (VIDEO 1)

1. Reduce the white and dark clip by VR5 (Y DC) and VR7 (Y WC).
2. Set VR6 (Y MOD BAL) to the centre position.

Step 3.

1. SCOPE : TP11 (VIDEO 2)
2. Supply the 9.2MHz sine wave signal to TP7 (VIDEO 2) with resistor (560ohm) and capacitor (0.1u) for white Peak (VR3) (VIDEO 2).
3. Adjust VR3 so that the beat of white peak becomes minimum.
4. Supply the 6.63MHz sine wave signal to TP7 (VIDEO 2) with resistor (560ohm) and capacitor (0.1u) for sync tip (VR4) (VIDEO 2)
5. Adjust VR4 so that the beat of sync tip becomes minimum.

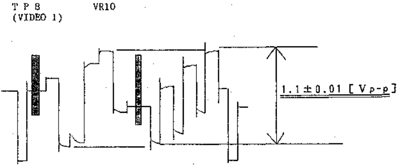

SG
560ohm
0.1μ
TP7
(VIDEO 2)


VIDEO2 TP11
MINIMUM BEAT
WHITE PEAK
9.2 ± 0.01(MHz)
VR3
SYNC TIP
MINIMUM BEAT
6.63 ± 0.01(MHz)
VR4

7-5. C NON-LINEAR LEVEL ADJUSTMENT

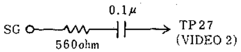
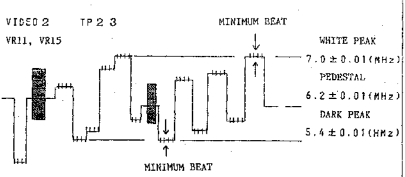
(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP8	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR10 (C NL LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO SECTION 7-1. INPUT SELECT : COMPONENT
Step 2. SCOPE : TP8	

7-6. C DEVIATION ADJUSTMENT (VIDEO 1)

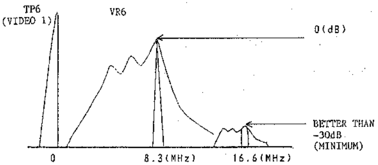
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP9 (VIDEO 1) TP23 (VIDEO 2) TP27 (VIDEO 2)	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 100% COLOUR BAR	VR14 (C. DARK CLIP) (VIDEO 1) VR31 (C. WHITE CLIP) (VIDEO 1) VR13 (C. MOD BAL) (VIDEO 1) VR11 (C. DEV.) (VIDEO 2) VR15 (C. FREQ) (VIDEO 2)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO SECTION 7-1. INPUT SELECT : COMPONENT
Step 2. SCOPE : TP9 (VIDEO 1) 1. Reduce the white and dark clip by VR31 (C WC) and VR14 (C DC). 2. Set VR13(C MOD BAL) to the centre position.	
Step 3. 1. SCOPE : TP23 (VIDEO 2) 2. Supply the 7.0MHz sine wave signal to TP27 with resistor (560ohm) and capacitor (0.1u) for white Peak (VR11) (VIDEO 2). 3. Adjust VR11(VIDEO 2) so that the beat of white peak becomes minimum. 4. Supply 5.4MHz sine wave signal to TP27 with resistor (560ohm) and capacitor (0.1u) for the Dark Clip (VR15) (VIDEO 2). 5. Adjust VR15(VIDEO 2) so that the beat of dark peak becomes minimum.	 0.1μ SG 560ohm TP27 (VIDEO 2)  VIDEO 2 TP 2 3 VR11, VR15 MINIMUM BEAT WHITE PEAK 7.0 ± 0.01(MHz) PEDESTAL 6.2 ± 0.01(MHz) DARK PEAK 5.4 ± 0.01(HMz) MINIMUM BEAT

7-7-1. Y MODULATOR BALANCE ADJUSTMENT (BY USING SPECTRUM ANALYZER)

(VIDEO 1)

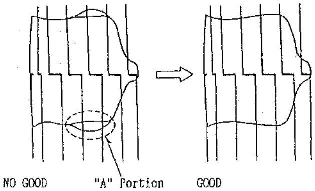
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP6	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	SPECTRUM ANALYZER	COMPONENT APL 50% FLAT FIELD	VR6 (Y MOD BAL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO SECTION 7-1. INPUT SELECT : COMPONENT
Step 2. SCOPE : TP6	
Step 3. 1. Confirm the Y Deviation Adjustment (7-4) is completed. 2. If it is not, readjust the Y Deviation Adjustment.	

7-7-2. Y MODULATOR BALANCE ADJUSTMENT (BY USING OSCILLOSCOPE)

(VIDEO 1)

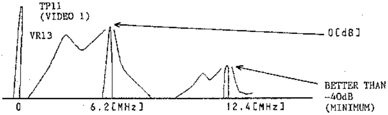
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
COMPONENT Y OUT	E-E (EJECT)	-------	OSCILLOSCOPE	COMPONENT 60% H. SWEEP	VR6 (Y MOD BAL)

Step 1. MACHINE CONDITION	REFER TO SECTION 7-1. INPUT SELECT : COMPONENT
Step 2. 1. SCOPE : COMPONENT Y OUT 2. Adjust VR6 so the "A" portion High Frequency moire is minimized.	COMPONENT Y OUT 
Step 3. 1. Confirm the Y Deviation Adjustment (7-4) is completed. 2. If it is not, readjust the Y Deviation Adjustment.	

7-8-1. C. MODULATOR BALANCE ADJUSTMENT
(BY USING SPECTRUM ANALYZER)

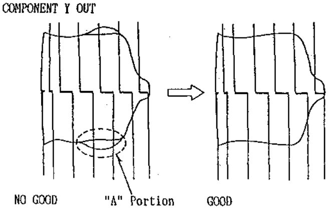
(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP11	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	SPECTRUM ANALYZER	COMPONENT APL 50% FLAT FIELD (NO SIGNAL AT R-Y, B-Y INPUT)	VR13 (C. MOD BAL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO SECTION 7-1. INPUT SELECT : COMPONENT
Step 2. SCOPE : TP11	
Step 3. 1. Confirm the C. Deviation Adjustment (7-6) is Completed. 2. If it is not,readjust the C. Deviation Adjustment.	

7-8-2. C. MODULATOR BALANCE ADJUSTMENT (BY USING OSCILLOSCOPE)

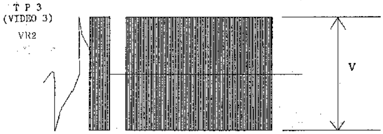
(VIDEO 1)

<table>
<tr><th>TEST POINT</th><th>MODE</th><th>TAPE USED</th><th>M.EQ.</th><th>INPUT SIGNAL</th><th>ADJUSTMENT</th></tr>
<tr><td>COMPONENT
Y OUT</td><td>E-E
(EJECT)</td><td>-------</td><td>OSCILLOSCOPE</td><td>COMPONENT
60%
H. SWEEP</td><td>VR13 (C. MOD BAL)</td></tr>
<tr><td colspan="3">Step 1.
MACHINE CONDITION</td><td colspan="3">REFER TO SECTION 7-1.
INPUT SELECT : COMPONENT</td></tr>
<tr><td colspan="3">Step 2.
1. SCOPE : COMPONENT Y OUT
2. Adjust VR13 so the "A" portion High Frequency moire is minimized.</td><td colspan="3"> </td></tr>
<tr><td colspan="3">Step 3.
1. Confirm the C. Deviation Adjustment (7-6) is Completed.
2. If it is not,readjust the C. Deviation Adjustment.</td><td colspan="3"></td></tr>
</table>

7-9. Y NON-LINEAR LIMITER LEVEL ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP3	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT BOW TIE	VR2 (Y NL LIMIT LEVEL)

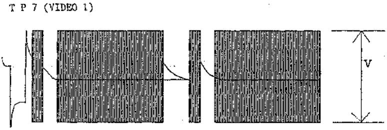
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 7-1. INPUT SELECT : COMPONENT Y NON LINEAR LEVEL (7-2) should be completed.
Step 2. SCOPE : TP3	V = 3 4 0 ± 5 (mVp-p) 

7-10. C. NON-LINEAR LIMIT LEVEL ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP7	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT BOW TIE	VR12 (C. NL LIMIT LEVEL)

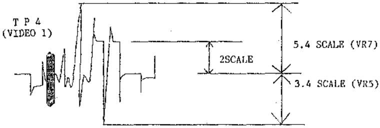
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	REFER TO THE SECTION 7-1. INPUT SELECT : COMPONENT C. NON LINEAR LEVEL (7-5) should be completed.
Step 2. SCOPE : TP7	V = 3 6 0 ± 5 (mVp-p) 

7-11. Y WHITE/DARK CLIP ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP4	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT 2T SIGNAL TO Y INPUT	VR5 (Y D/C) VR7 (Y W/C)

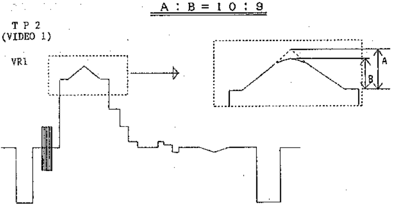
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 7-1. INPUT SELECT : COMPONENT Y Deviation Adjustment (7-4) should be completed.
Step 2. SCOPE : TP4 PEDESTAL ~ WHITE PEAK = 2scales	 T P 4 (VIDEO 1) 2SCALE 5.4 SCALE (VR7) 3.4 SCALE (VR5)
Note: After finish this adjustment, set the "variable level" of the scope to the original.	

7-12. VIDEO CLIP ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP2	FULL E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT REFERENCE SIGNAL COMPONENT LEVEL REFERENCE COLOR BAR	VR1 (VIDEO CLIP)

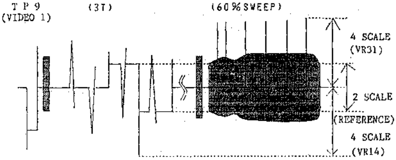
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. MACHINE CONDITION	REFER TO THE SECTION 7-1. INPUT SELECT : COMPONENT Y NON Linear Level Adjustment (7-2) should be completed.
Step 2. SCOPE : TP2	

7-13. C. WHITE/DARK CLIP ADJUSTMENT

(VIDEO 1)

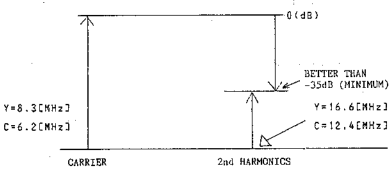
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP9	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT 3T PULSE AND 60% H. SWEEP	VR14 (C W/C) VR31 (C D/C)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 7-1. INPUT SELECT : COMPONENT C. Deviation Adjustment (7-6) should be completed.
Step 2. SCOPE : TP9 -BAR ~ +BAR = 2scales 1. Supply the Component 3T Pulse signal to component input. 2. Adjust VR31 so that the dark clip level is 4scales. 3. Supply the Component 60% H. Sweep signal to component input. 4. Adjust VR14 so that the white clip level is 4scales.	 T P 9 (VIDEO 1) (3T) (60%SWEEP) 4 SCALE (VR31) 2 SCALE (REFERENCE) 4 SCALE (VR14)
Note: After finish this adjustment, set the "variable level" the scope to the original.	

7-14. REC AMP Y & C CH BALANCE ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP12 TP13 TP15 TP16	REC	☐ BLANK TAPE ☐ ALIGNMENT TAPE	SPECTRUM ANALYZER	COMPONENT APL 50% FLAT FIELD (NO SIGNAL AT R-Y, B-Y INPUT)	VR18 (Y CH2 BAL) VR19 (Y CH1 BAL) VR24 (C CH2 BAL) VR25 (C CH1 BAL)

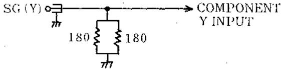
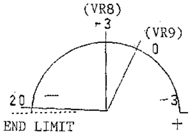
ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 7-1. INPUT SELECT : COMPONENT
Step 2. SCOPE : TP12 (Y CH2) ---> 2nd Harmonics = Better than -35dB TP13 (Y CH1) ---> 2nd Harmonics = Better than -35dB TP15 (C CH2) ---> 2nd Harmonics = Better than -35dB TP16 (C CH1) ---> 2nd Harmonics = Better than -35dB	 0(dB) BETTER THAN -35dB (MINIMUM) Y=8.3[MHz] C=6.2[MHz] Y=16.6[MHz] C=12.4[MHz] CARRIER 2nd HARMONICS

7-15. VIDEO LEVEL METER ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
VIDEO METER	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	---------	COMPONENT 100% COLOUR BAR (WITH RESISTOR)	VR8 (ZERO ADJ.) VR9 (METER LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION

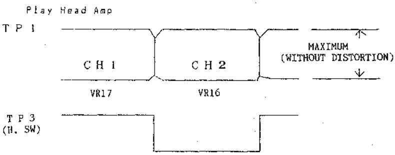
Step 1. MACHINE CONDITION	INPUT SELECT : COMPONENT METER SELECT : VIDEO/ TRACKING
Step 2. 1. Supply the Component Colour Bar signal to the Component Input with 90 ohm resistor. 2. Adjust VR8 so that the METER LEVEL indicates "-3". 3. Remove the resistors to supply the original signal. 4. Adjust VR9 so that the METER LEVEL indicates "0". 5. Disconnect the all signals confirm that the meter goes to end limit.	 SG (Y) COMPONENT Y INPUT 180 180  (VR8) -3 (VR9) 0 20 − -3 END LIMIT +

7-16. Y RECORDING CURRENT ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP1 (PLAY HEAD AMP) TP3 (PLAY HEAD AMP)	REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	COMPONENT APL 50% FLAT FIELD	VR16 (Y CH2 CURR) VR17 (Y CH1 CURR)

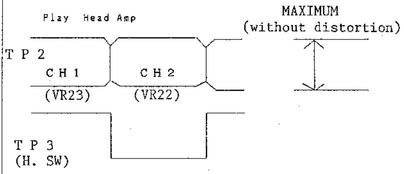
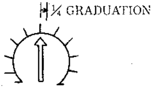
ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1. SCOPE CH1 : TP1 SCOPE CH2 : TP3 (Trigger)	 Play Head Amp TP1 CH1 CH2 MAXIMUM (WITHOUT DISTORTION) VR17 VR16 TP3 (H. SW)

7-17. C RECORDING CURRENT ADJUSTMENT

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP2 (PLAY HEAD AMP) TP3 (PLAY HEAD AMP)	REC	BLANK ■ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	COMPONENT APL 50% FLAT FIELD (NO SIGNAL AT R-Y, B-Y INPUT)	VR22 (C CH2 CURR) VR23 (C CH2 CURR)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 7-1. INPUT SELECT : COMPONENT
Step 2. SCOPE CH1 : TP2 SCOPE CH2 : TP3 (Trigger)	 Play Head Amp MAXIMUM (without distortion) T P 2 C H 1 C H 2 (VR23) (VR22) T P 3 (H. SW)
Step 3. 1. Turn the each VR(VR22 and VR23) to 1/4 graduation clokwise.	 ¼ GRADUATION

7-18. Y REC AMP FREQUENCY RESPONSE ADJUSTMENT & CONFIRMATION

(VIDEO I)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
COMPONENT Y OUT OF AU-665 (AU-65)	REC AU-520S (AU-520) ↓ PLAY AU-665 (AU-65)	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	WAVEFORM MONITOR	COMPONENT 60% H. SWEEP	VR20 (Y CH2 FC) VR21 (Y CH1 FC)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

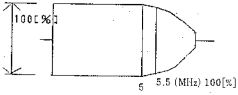
MACHINE CONDITION

REFER TO THE SECTION 7-1.
INPUT SELECT : COMPONENT
The playback frequency response of AU-665 (AU-65) should be completed.

Step 2.

1. RECORDING : Component 60% H. Sweep for a few minutes.
2. PLAYBACK : AU-665 (FOR AU-520S)
   AU-65 (FOR AU-520)
3. WAVEFORM MONITOR :
   COMPONENT Y OUT OF AU-665 (AU-65)
4. Confirm that the frequency response is shown.

AU-665 (AU-65)
COMPONENT Y OUT (75 ohm TERMINATION)



REC VTR	FOR AU-520S		FOR AU-520
PLAYBACK VTR	AU-665 "E" VERSION	AU-665 "B" VERSION	AU-65
SPEC	0.5Hz ~ 5MHz : 100 ± 5%		0.5Hz ~ 5MHz : 100 ± 8%

Step 3.

1. If it is not, readjust VR20 and VR21.
2. The Y Recording Current Adjustment (7-16) is neccessary after adjust VR20 and VR21.
3. Repeat STEP 2.

INFORMATION :

When the VR20 and VR21 is turned to clockwise, the frequency response is decreased.

Step 4. (CONFIRMATION)

1. When the PB EQ switch is turned to "AUTO" side at AU-665, AU-65 or AU-62 if the frequency response is not in the specification, readjust VR609 (Y BURST LEVEL) on DECODER Section.

7-19. C REC AMP FREQUENCY RESPONSE ADJUSTMENT & CONFIRMATION

(VIDEO 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
COMPONENT Y OUT OF AU-665 (AU-65)	REC AU-520S (AU-520) ↓ PLAY AU-665 (AU-65)	☐ BLANK TAPE ☐ ALIGNMENT TAPE	WAVEFORM MONITOR	COMPONENT 60% H. SWEEP	VR26 (Y CH2 FC) VR27 (Y CH1 FC)

ADJUSTMENT PROCEDURE & SPECIFICATION

Step 1.

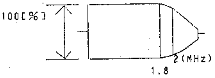
MACHINE CONDITION

REFER TO THE SECTION 7-1.
INPUT SELECT : COMPONENT
The playback frequency response of AU-665 (AU-65) should be completed.

Step 2.

1. RECORDING : Component 60% H. Sweep for a few minutes.
2. PLAYBACK : AU-665 (FOR AU-520S)
   AU-65 (FOR AU-520)
3. WAVEFORM MONITOR :
   COMPONENT Y OUT OF AU-665 (AU-65)
4. Confirm that the frequency response is shown.

AU-665 (AU-65)
COMPONENT R-Y/B-Y OUT (75ohm Termination)



REC VTR	FOR AU-520S	FOR AU-520
PLAYBACK VTR	AU-665 "E" VERSION AU-665 "B" VERSION	AU-65
SPEC	0.5Hz ~ 1.5MHz : 100 ± 5% 2MHz : Better then 70%	0.5Hz ~ 5MHz : 100 ± 8% 2MHz : Better than 65%

Step 3.

1. If it is not, readjust VR20 and VR21.
2. The Y Recording Current Adjustment (7-16) is neccessary after adjust VR20 and VR21.
3. Repeat STEP 2.

INFORMATION :

When the VR20 and VR21 is turned to clockwise, the frequency response is decreased.

Step 4. (CONFIRMATION)

1. When the PB EQ switch is turned to "AUTO" side at AU-665, AU-65 or AU-62 if the frequency response is not in the specification, readjust VR609 (Y BURST LEVEL) on DECODER Section.

< LINEAR AUDIO SECTION >

8-1. PREPARATION FOR AUDIO ADJUSTMENT

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
		☐ BLANK TAPE ☐ ALIGNMENT TAPE			

ADJUSTMENT PROCEDURE & SPECIFICATION	
1. INPUT SELECT SW (JACK PANEL)	LINE POSITION (CH1 ~ CH4)
2. LINE INPUT LEVEL SELECT SW (JACK PANEL)	HIGH POSITION (CH1 ~ CH4) (H:0dBm, M:-20dBm, L:-60dBm)
3. AUDIO LIMITER SW (FRONT PANEL)	OFF
4. RECORDING VR (FRONT PANEL)	CLICK POINT
5. PLAYBACK VR (FRONT PANEL)	CLICK POINT
6. LINE OUTPUT LEVEL SELECT SW (AUDIO C.B.A.) SW1, SW201	HIGH POSITION (H:0dBm, L:-20dBm)
7. DOLBY SW (AUDIO C.B.A.)	OFF POSITION
8. C PB SW (JACK PANEL)	OFF
9. TRACKING VR (JACK PANEL)	MAXIMUM

8-2. NR ENCODE LEVEL ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP3 (CH1) TP4 (CH2)	REC PAUSE	■ BLANK TAPE ☐ ALIGNMENT TAPE	VTVM	1KHz SINEWAVE SIGNAL AT 0dBu TO CH1/CH2 INPUTS	VR4 (CH1 ENC ADJ) VR11 (CH2 ENC ADJ)

ADJUSTMENT PROCEDURE & SPECIFICATION	
Step 1. MACHINE CONDITION	REFER TO THE SECTION 8-1.
Step 2. TP3(TP4) = 300(+/- 5mVrms)	VR4 (VR11)

8-3. CH1, CH2 METER ADJUSTMENT

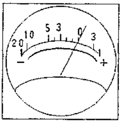
(AUDIO)

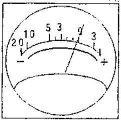
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH1 METER CH2 METER (FRONT PANEL)	REC PAUSE	■ BLANK TAPE ☐ ALIGNMENT TAPE	---------	1KHz SINEWAVE SIGNAL at 0dBu TO CH1/CH2 INPUTS	VR21 (MET ADJ) VR22 (MET ADJ)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.

FOR AU-520S-"E" VERSION, AU-520

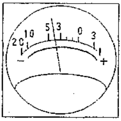
- Adjust VR21 so that the CH1 meter indicates 0VU.
- Adjust VR22 so that the CH2 meter indicates 0VU.

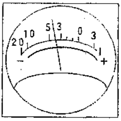




FOR AU-520S "B" VERSION

- Adjust VR21 so that the CH1 meter indicates -4VU.
- Adjust VR22 so that the CH2 meter indicates -4VU.





8-4. CH1/CH2 LINE OUTPUT LEVEL ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH1 LINE OUT CH2 LINE OUT	REC PAUSE	■ BLANK TAPE ☐ ALIGNMENT TAPE	VTVM	1KHz SINEWAVE at +0dBu to CH1/CH2 INPUTS	VR18 (CH1 LINE OUT LEVEL) VR19 (CH2 LINE OUT LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
Step 1. CH1 LINEOUT = 0dBu ± 0.2dB LEVEL CH2 LINEOUT = 0dBu ± 0.2dB LEVEL	 VR18 VR19
Step 2. · LINE OUTPUT LEVEL SELECT SW SW1 ····· LOW POSITION (AUDIO C.B.A.)	Confirm that the LINE OUT of CH1 and CH2 is -20dBu ± 1dB.

8-5. CH1/CH2 LINE OUT FREQUENCY CONFIRMATION

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH1 LINE OUT CH2 LINE OUT	REC PAUSE	■ BLANK TAPE ☐ ALIGNMENT TAPE	VTVM	1KHz SINEWAVE SIGNAL AT +0dBu to CH1/CH2 INPUTS	------------

ADJUSTMENT PROCEDURE & SPECIFICATION

MACHINE CONDITION	REFER TO THE SECTION 8-1.
Confirm that the frequency response of the line output is as shown in figure.	

FREQUENCY(Hz)	20	50	15K	20K
Confirmation Level(dB)	+1.0 −3.0	+0.5 −1.0	±0.5	±1.0

8-6. PLAYBACK EQ ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH1 LINE OUT CH2 LINE OUT	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE FREQUENCY RESPONCE PORTION	VTVM	---------	VR1 (CH1 PB EQ) VR8 (CH2 PB EQ)

ADJUSTMENT PROCEDURE & SPECIFICATION

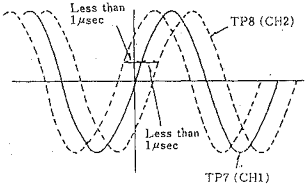
MACHINE CONDITION	REFER TO THE SECTION 8-1.
· Adjust VR1 and VR8 as shown in figure.	

Frequency	Spec.(1kHz:0dB)
40~1KHz	Confirm that the frequency response is less than +1.5dB, −3.0dB.
1KHz~15KHz	Adjust VR1 and VR8 so that the each frequency response is less than ±1.0dB

8-7. PLAYBACK PHASE CONFIRMATION

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP7 (CH1) TP8 (CH2)	PLAY BACK	BLANK ☐ TAPE ALIGNMENT ■ TAPE 15KHz PORTION	OSCILLO SCOPE	-----------	Audio Azimuth (Mechanical)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
Confirm that the phase difference is less than +/- 1usec as shown in figure. If it is not less than +/- 1usec, readjust the Audio Azimuth Adjustment in the Mechanical Adjustment SECTION and PB EQ Adjustment. (Section 8-6)	 Less than 1μsec TP8 (CH2) Less than 1μsec TP7 (CH1)

8-8. NR DECODE LEVEL ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP12 (CH1) TP13 (CH2)	PLAY BACK	BLANK ☐ TAPE ALIGNMENT ■ TAPE 1KHz OVU PORTION	VTVM	-----------	VR2 (CH1 NR DECODE) VR9 (CH2 NR DECODE)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
TP12(TP13) = 300(+/-5mVrms)	VR2 (VR9)

8-9. CH1, CH2 PLAYBACK LEVEL ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH1 LINE OUT CH2 LINE OUT	PLAY BACK	BLANK ☐ TAPE ALIGNMENT ■ TAPE 1KHz OVU PORTION	VTVM	---------	VR3 (CH1 PB LEVEL) VR10 (CH2 PB LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
CH1(CH2) LINE OUT = 0dBu ± 0.2dB	VR3 (VR10)

8-10. CONFIDENCE PLAYBACK LEVEL ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP23 (CH1) TP24 (CH2)	PLAY BACK	BLANK ☐ TAPE ALIGNMENT ■ TAPE 1KHz OVU PORTION	VTVM	---------	VR6 (CH1 C.PB LEVEL) VR13 (CH2 C.PB LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
TP23(TP24) = -22dBV ± 0.2dB	VR6 (VR13)

8-11. AUDIO BIAS TRAP ADJUSTMENT

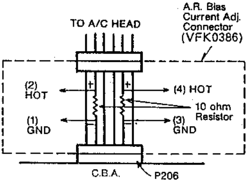
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP19 (CH1) TP20 (CH2)	REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	NO INPUT	FL7 (CH1 BIAS TRAP) FL8 (CH2 BIAS TRAP)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
TP19 = Bias frequency component of 70KHz is minimum.	FL7
TP20 = Bias frequency component of 70KHz is minimum.	FL8

8-12. AUDIO BIAS CURRENT ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP23 (CH1) TP24 (CH2)	REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	VTVM	1KHz SINEWAVE SIGNAL AT 8dBu(AU-520S-B) 6dBu(AU-520S-E) 0dBu(AU-520) TO CH1/CH2 INPUTS	VC1 (CH1 BIAS CURR) VC2 (CH2 BIAS CURR)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1. C PB SW : ON · Turn VR1 and VR2 (AUDIO SUB 6 P.C.B.) to fully clockwise.
Step 1. Connect the scope to TP23(TP24)	· Adjust VC1(VC2) so that the output level is maximumed. · Measure the output level (A).
SteP 2. · Connect the VTVM as shown in figure.	 TO A/C HEAD A.R. Bias Current Adj. Connector (VFK0386) (2) HOT (1) GND (4) HOT 10 ohm Resistor (3) GND C.B.A. P206
Step 3.	·Re-adjust VC1(VC2) so that the output level is 1dB up than A.

8-13. REC FREQUENCY RESPONSE ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH1 LINE OUT CH2 LINE OUT	REC ↓ PLAY BACK	■ BLANK TAPE ☐ ALIGNMENT TAPE	VTVM	SINEWAVE SIGNAL AT -10dBu to CH1/CH2 INPUTS (40Hz ~ 15KHz)	FL5 VR5 (CH1 REC EQ 1) FL6 VR12 (CH2 REC EQ 1) VR23 (CH1 REC EQ 2) VR24 (CH2 REC EQ 2)

<table>
<tr><th colspan="2">ADJUSTMENT PROCEDURE & SPECIFICATION</th></tr>
<tr><td>MACHINE CONDITION</td><td>REFER TO THE SECTION 8-1.
PB EQ ADJUSTMENT (8-6) Should be completed.</td></tr>
<tr><td>Step 1.
Make a recording for a few minutes.</td><td>While recording set the frequency of the input signal to 40Hz, 125HZ, 500Hz, 1KHz, 3KHz, 5KHz, 10KHz, 12.5KHz and 15KHz, (recording each frequency for a few moments)</td></tr>
<tr><td>Step 2.
Connect the VTVM to CH1 and CH2 LINE OUT, and playback the just recorded portion.</td><td>Adjust that the each level is as shown in figure.
<table>
<tr><th>Frequency</th><th>Specification (dB)</th><th>Adjustment</th></tr>
<tr><td>40Hz~125Hz</td><td>Less than±2.0dB</td><td>——</td></tr>
<tr><td>125Hz~1KHz</td><td>Less than±1.0dB</td><td>——</td></tr>
<tr><td>1kHz</td><td>0dB (Reference)</td><td>——</td></tr>
<tr><td>1kHz~10kHz</td><td>Less than±0.5dB</td><td>FL5(CH1)
FL6(CH2)</td></tr>
<tr><td>10kHz~15kHz</td><td>Less than±0.5dB</td><td>VR23 (CH1) VR5 (CH1)
VR24 (CH2) VR12 (CH2)</td></tr>
</table></td></tr>
<tr><td>Step 3.
If the 5KHz specification is more than +0.5dB --->
If the 10KHz specification is more than +1.0dB ---></td><td>Remove the capacitor C12(CH1) or C26(CH2) on the AUDIO C.B.A.
Remove the capacitor C145(CH1) or C146(CH2) on the AUDIO C.B.A.</td></tr>
</table>

8-14. AUDIO REC CURRENT ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP23 TP24	REC (C PB SW : ON) ↓ PLAY BACK	BLANK ■ TAPE ALIGNMENT ☐ TAPE	VTVM	1KHz SINEWAVE SIGNAL AT +0dBu to CH1/CH2 INPUTS	VR7 (CH1 REC CURR) VR14 (CH2 REC CURR)

ADJUSTMENT PROCEDURE & SPECIFICATION

MACHINE CONDITION	REFER TO THE SECTION 8-1. C PB SW : ON (RIGHT SIDE PANEL)
Step 1. · Make a recording for a few minutes. · Connect the VTVM to TP23(TP24).	Adjust VR7 T23 = -22dBu (+/- 0.5dB) Adjust VR14 T24 = -22dBu (+/- 0.5dB)
Step 2. Playback the just recorded portion.	· Confirm that the output of each channel is +0dBu (+/- 0.2dB) · If it is not within specification, readjust VR7 and VR14.

8-15. PRE-DISTORTION ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP23 (CH1) TP24 (CH2)	REC	BLANK ■ TAPE ALIGNMENT ☐ TAPE	VTVM	80Hz SINEWAVE SIGNAL AT 8dBu(AU-520S-B) 6dBu(AU-520S-E) TO CH1/CH2 INPUTS	VR1 (AUDIO SUB 6) VR2 (AUDIO SUB 6)

ADJUSTMENT PROCEDURE & SPECIFICATION

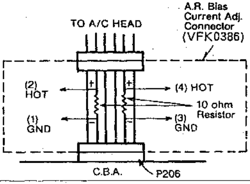
MACHINE CONDITION	REFER TO THE SECTION 8-1. C PB SW : ON (RIGHT SIDE PANEL)
Step 1. Connect the scope to TP23(TP24)	Adjust VR1(VR2) so that the distortion becomes minimum. (FOR AU-520S) Turn VR1 (VR2) tp fullness of clockwise (FOR AU-520)
Step 2.	Confirm that the recording and playback level. (1KHz SINEWAVE SIGNAL AT 0dBu)

8-16. AFTER RECORDING BIAS CURRENT ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
A/R BIAS CURRENT ADJUSTMENT CONNECTOR (VFK0386) CH1 LINE OUT CH2 LINE OUT	REC ↓ CH2 AUDIO DUB	BLANK ■ TAPE ALIGNMENT ☐ TAPE	VTVM	NO SIGNAL ↓ 1KHz SINEWAVE SIGNAL AT 0dBu	VC4 (CH1 BIAS CURR) VC5 (CH2 BIAS CURR)

ADJUSTMENT PROCEDURE & SPECIFICATION

MACHINE CONDITION	REFER TO THE SECTION 8-1. AUDIO REC CURRENT ADJUSTMENT (8-14) should be completed.
Step 1. · Connect the VTVM as shown in figure. · Don't supply any signal to the LINE INPUTS.	 A.R. Bias Current Adj. Connector (VFK0386) TO A/C HEAD (2) HOT (4) HOT 10 ohm Resistor (1) GND (3) GND + + C.B.A. P206
Step 2. · Insert a cassette and make a recording. · Connect the VTVM to (2) HOT and (1) GND as shown in Step 1.	· Note the bias current value.
Step 3. · Place the unit in the STOP mode then CH1 AUDIO DUB mode.	Adjust VC4 so that after recording bias current the value is the same as the value notid in Step 2.
Step 4. · Place the unit in the STOP mode then CH2 AUDIO DUB mode. · Connect the VTVM to (4) HOT and (3) GND as shown in Step 1.	Adjust VC5 so that after recording bias current the value is the same as the value noted in Step 2.
Step 5. · Supply 1KHz sinewave signal at 0dBm to the CH1(CH2) input. · Place the unit in the CH1(CH2) AUDIO DUB mode for a few minutes. · Playback the just recorded portion. · Connect the VTVM to CH1(CH2) LINE OUT.	Confirm that the output value is 0dBu (± 0.5dB).

8-17. TIME CODE BIAS CURRENT ADJUSTMENT

(AUDIO)

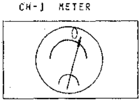
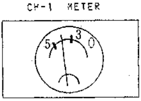
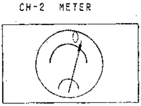
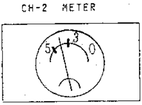
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP3 (FRONT 2 C.B.A.) TP4 (FRONT 2 C.B.A.)	REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	VTVM	CH1 CH2 NO INPUT EXT TC NO INPUT	VC3 (T/C BIAS CURR)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1. T/C SIGNAL SELECTION SW : EXT (on the side panel)
Connect the VTVM to TP3 and TP4(GND)	Adjust VC3 to 20mV (+/- 0.2mV)

8-18. CONFIDENCE PLAYBACK LEVEL ADJUSTMENT

(AUDIO)

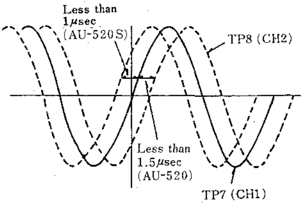
TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH1 METER CH2 METER	REC	BLANK ■ TAPE ALIGNMENT ☐ TAPE	----------	1KHz SINEWAVE SIGNAL 0dBm to CH1/CH2 INPUTS	VR6 (CH1 C PIB LEV) VR13 (CH2 C PB LEV)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1. C PB SW. : ON (on the side panel)
Step 1. Adjust VR6(CH1) as shown in figure.	 AU-520S-E AU-520  AU-520S-B
Step 2. Adjust VR13(CH2) as shown in figure.	 AU-520S-E AU-520  AU-520S-B

8-19. REC PHASE ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP7 (CH1) TP8 (CH2)	REC ↓ PLAY	■ BLANK TAPE ☐ ALIGNMENT TAPE	OSCILLO SCOPE	15KHz (AU-520S) 10KHz (AU-520) SINEWAVE SIGNAL AT 0dBu to CH1/CH2 INPUT	VR20 (REC PHASE)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1. PB PHASE CONFIRMATION (8-7) should be completed.
Step 1. · Set VR20 to centre position. · Make a recording for a few minutes and playback the just recorded portion.	Confirm that the phase difference is ± 1μsec (AU-520S) Confirm that the phase difference less than 0.5μsec (AU-520)  Less than 1μsec (AU-520S) TP8 (CH2) Less than 1.5μsec (AU-520) TP7 (CH1)
Step 2. · If it is not, turn VR20 by a small amout and meke a new recording. · Playback the just recorded portion.	Confirm that the phase difference is +/- 1usec. (± 1.5μsec) (Repeat this procedure until the phase difference is +/- 1usec.)(± 1.5μsec)

< FM AUDIO SECTION >

9-1. CH3, CH4 AUDIO INPUT (E-E) LEVEL ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP201 (CH3) TP206 (CH4)	REC PAUSE	■ BLANK TAPE ☐ ALIGNMENT TAPE	VTVM	1KHz SINEWAVE SIGNAL AT 0dBm to CH1/CH2 INPUTS	VR210 (CH3 INPUT LEV) VR211 (CH4 INPUT LEV)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
Connect the VTVM to TP201(CH3) and TP206(CH4).	Adjust VR210(CH3) and VR211(CH4) so that input level is -22dBV (+/- 0.25dB)

9-2. CH3, CH4 LINE OUT LEVEL ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH3 LINE OUT CH4 LINE OUT	REC PAUSE	■ BLANK TAPE ☐ ALIGNMENT TAPE	VTVM	1KHz SINEWAVE SIGNAL AT 0dBm TO CH1/CH2 INPUTS	VR212 (CH3 LINE OUT) VR213 (CH4 LINE OUT)

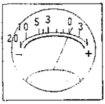
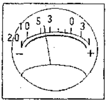
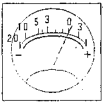
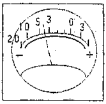
ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1. CH3/CH4 INPUT LEVEL (9-1) should be adjusted.
Step 1. · Connect the VTVM to the LINE OUT of CH3 and CH4.	Adjust VR212 and VR213 so that the output level is 0dBm (+/- 0.2dB)
Step 2. · SW201 : LOW position (LINE OUTPUT LEVEL SELECT SW201)	Confirm that the output level is -20dBm (+/- 1dB)

9-3. CH3, CH4 METER ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH3 METER CH4 METER	REC PAUSE	■ BLANK TAPE ☐ ALIGNMENT TAPE	---------	1KHz SINEWAVE SIGNAL 0dBm TO CH1/CH2 INPUTS	VR208 (CH3 LEVEL) VR209 (CH4 LEVEL)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.

Adjust VR208 (CH3) as shown in figure.	CH-3 METER  AU-520S-E AU-520 CH-3 METER  AU-520S-B
Adjust VR209 (CH4) as shown in figure.	CH-4 METER  AU-520S-E AU-520 CH-4 METER  AU-520S-B

9-4. CARRIER FREQUENCY ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP204 (CH3) TP209 (CH4)	REC	■ BLANK TAPE ☐ ALIGNMENT TAPE	FREQUENCY COUNTER	NO INPUT	VR203 (CH3 CARRIER) VR206 (CH4 CARRIER)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
TP204 = 400KHz (+/- 5KHz) TP209 = 700KHz (+/- 5KHz)	VR203 VR206

9-5. CH3, CH4 PLAYBACK LEVEL ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH3 LINE OUT CH4 LINE OUT	PLAY BACK	BLANK ☐ TAPE ALIGNMENT ■ TAPE 1KHz OVU portion	VTVM	----------	VR201 (CH3 PB LEV) VR204 (CH4 PB LEV)

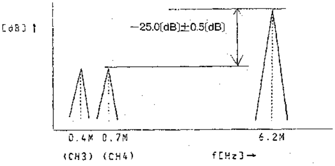
ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1. CH3/CH4 LINE OUT LEVEL (9-2) should be adjusted.
· Adjust the TRACKING VR so that the RF envelope is maximum. · Connect the VTVM to CH3(CH4) LINE OUT.	Adjust VR201(VR204) to 0dBm (+/- 0.2dB)

9-6. FM REC CURRENT ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP19 (VIDEO 1 C.B.A.)	REC ↓ PLAY BACK	BLANK ■ TAPE ALIGNMENT ☐ TAPE	SPECTRUM ANALYZER	VIDEO : 50% WHITE SIGNAL AUDIO : NO INPUT	VR207 (FM REC CURR)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	· REFER TO THE SECTION 8-1. · C REC CURRENT ADJUSTMENT and C FREQUENCY ADJUSTMENT should be completed.

· Make a recording. · Connect the spectrum analyzer to TP19 (using the FET probe) · Make a recording.	Adjust VR207 as shown below.  [dB] ↑ −25.0[dB]±0.5[dB] 0.4M 0.7M 6.2M (CH3) (CH4) f[Hz]→

9-7. DEVIATION ADJUSTMENT

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH3 LINE OUT CH4 LINE OUT	REC ↓ PLAY BACK	■ BLANK TAPE ☐ ALIGNMENT TAPE	VTVM	1KHz SINEWAVE SIGNAL AT 0dBm TO CH1/CH2 INPUTS	VR202 (CH3 DEV) VR205 (CH4 DEV)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	· REFER TO THE SECTION 8-1. · CH3, CH4 PB LEVEL ADJUSTMENT (9-5) should be completed.
· Make a recording for a few minutes and playback the just recorded portion. · Connect the VTVM to CH3(CH4) LINE OUT. · Measure the output level.	· If they are not 0dBu (+/- 0.2dB), turn VR202 (VR205) a small amount, and make a new recording. · Then playback the just recorded portion and confirm that the output level is 0dBu (+/- 0.2dB) · Repeat this procedure until the above specification is met.

9-8. CH3, CH4 MUTING LEVEL ADJUSTMENT (AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP16 (VIDEO 2 P.C.B.)	PLAY BACK	☐ BLANK TAPE ■ ALIGNMENT TAPE 1KHz OVU PORTION	OSCILLO SCOPE	---------	VR214 (FM MUTING)

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
Step 1. · Connect the scope to TP16.	Set the VARIABLE LEVEL VR of the scope so that the envelope level becomes 8 scales.
Step 2. Turn the TRACKING VR so that the envelope level becomes 5 scales. This is a setting for Muting Level.	Adjust VR214 so that the audio signal is correct output at Line Out.
Step 3. Turn the TRACKING VR so that the envelope level becomes 4 scales.	Confirm that the Line Output signal is muted.

9-9. CH3,CH4 FREQUENCY RESPONSE CONFIRMATION

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH3 LINE OUT CH4 LINE OUT	PLAY	BLANK ☐ TAPE ALIGNMENT ■ TAPE FREQUENCY RESPONSE PORTION	VTVM	---------	-----------

<table>
<tr><th colspan="2">ADJUSTMENT PROCEDURE & SPECIFICATION</th></tr>
<tr><td>Step 1.
MACHINE CONDITION</td><td>REFER TO THE SECTION 8-1.
All FM Audio Adjustment should be completed.</td></tr>
<tr><td>Step 2.
1. Playback the frequency response portion of the alignment tape.</td><td>SPECIFICATION
20Hz ~ 20KHz (REFERENCE = 1KHz)
↓
Better than + 1.0, - 2.0dB</td></tr>
</table>

9-10. CH3,CH4 SELF REC/PB F. RESPONSE CONFIRMATION

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH3 LINE OUT CH4 LINE OUT	SELF REC/PLAY	BLANK ■ TAPE ALIGNMENT ☐ TAPE	VTVM	REFERENCE LEVEL -10dB 20Hz ~ 20KHz	-----------

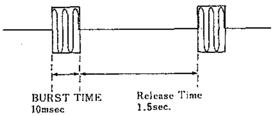
<table>
<tr><th colspan="2">ADJUSTMENT PROCEDURE & SPECIFICATION</th></tr>
<tr><td>Step 1.
MACHINE CONDITION</td><td>REFER TO THE SECTION 8-1.
All FM Audio Adjustment should be completed.</td></tr>
<tr><td>Step 2.
1. Record the above input signals in each 5 seconds.
2. Playback the portion just recorded.</td><td>SPECIFICATION
20Hz~20KHz(PEFERENCE=1KHz)
Better than +1.0,-2.0dB
<table>
<tr><th>FREQUENCY</th><th>SPECIFICATION</th></tr>
<tr><td>40Hz ~ 15KHz</td><td>±1.0(dB)</td></tr>
<tr><td>20Hz ~ 20KHz</td><td>±2.0(dB)</td></tr>
</table>
</td></tr>
</table>

9-11. PEAK METER ADJUSTMENT (FOR AU-520-E VERSION)

(AUDIO)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
METER	E-E	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	---------	LINE 1KHz TONE BURST	VR1 (CH1 PEAK) VR2 (CH2 PEAK) VR3 (CH3 PEAK) VR4 (CH4 PEAK)

ADJUSTMENT PROCEDURE & SPECIFICATION

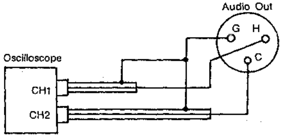
Step 1. MACHINE CONDITION	REFER TO THE SECTION 8-1. All Audio Adjustment should be completed.
Step 2. 1. Supply a 1KHz,+6dBu signal to Line Input. 2. Confirm that the Meter indication is "0" Vu. 3. Supply a 1KHz tone burst signal to Line Input. Adjust VR1,2,3,4 so that the meter indication is "0" Vu at each channel.	TONE BURST SIGNAL(1kHz) 

< AUDIO OUTPUT SECTION >

10-1. AUDIO OUT/LINE OUT BALANCE ADJUSTMENT

(AUDIO OUTPUT)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
CH1 CH2 CH3 CH4 LINE OUT	EJECT	BLANK ☐ TAPE ALIGNMENT ☐ TAPE	OSCILLO SCOPE	1KHz SINEWAVE SIGNAL AT +8dB SIGNAL TO CH1/CH2 CH3/CH4 INPUTS	VR1 (CH1 LINE OUT BAL) VR2 (CH2 LINE OUT BAL) VR3 (CH3 LINE OUT BAL) VR4 (CH4 LINE OUT BAL) * on the POWER SUPPLY & AUDIO OUTPUT C.B.A.

ADJUSTMENT PROCEDURE & SPECIFICATION	
MACHINE CONDITION	REFER TO THE SECTION 8-1.
Step 1. · Connect the scope CH1 to HOT of CH1 (CH2, CH3 and CH4) line out and CH2 to COLD of CH1 (CH2, CH3 and CH4) line out, as shown in figure 9-9-1. · Confirm that the volts range of scope is same as CH2 volts range. · Set the select switch of scope to add mode.	Adjust VR1(CH1 LINE OUT BAL), VR2(CH2 LINE OUT BAL), VR3(CH3 LINE OUT BAL) and VR4(CH4 LINE OUT BAL) so that the each AC level is minimimized. 

< AUDIO MONITOR SECTION >

11-1. AUDIO MONITOR ADJUSTMENT

<table>
<tr><th>TEST POINT</th><th>MODE</th><th>TAPE USED</th><th>M.EQ.</th><th>INPUT SIGNAL</th><th>ADJUSTMENT</th></tr>
<tr><td rowspan="2">P253 - Pin1</td><td rowspan="2"></td><td>☐ BLANK TAPE</td><td rowspan="2">VTVM</td><td rowspan="2">1KHz SINEWAVE
SIGNAL AT -22dBV
SIGNAL TO
P251 - Pin 7</td><td rowspan="2">VR2 (MON. LEVEL)</td></tr>
<tr><td>☐ ALIGNMENT TAPE</td></tr>
<tr><td colspan="6">ADJUSTMENT PROCEDURE & SPECIFICATION</td></tr>
<tr><td colspan="3">MACHINE CONDITION</td><td colspan="3">REFER TO THE SECTION 8-1.
AUDIO MONITOR SW : LINEAR CH1/CH3 POSITION
(RIGHT SIDE PANEL)
MONITOR BALANCE VR : CENTRE POSITION
(RIGHT SIDE PANEL)</td></tr>
<tr><td colspan="3">Step 1.
P253 - Pin1 = -26dBm ± 0.5dB</td><td colspan="3">VR2</td></tr>
<tr><td colspan="3">Step 2.
P253 - Pin3 = -14dbv ± 1.0dB</td><td colspan="3">CONFIRM</td></tr>
</table>

12-1. X'TAL OSC ADJUSTMENT

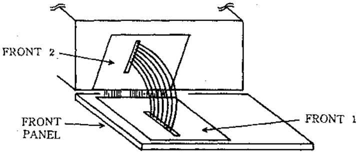
(FRONT 1)

TEST POINT	MODE	TAPE USED	M.EQ.	INPUT SIGNAL	ADJUSTMENT
TP2	FULL E-E	☐ BLANK TAPE ☐ ALIGNMENT TAPE	FREQUENCY COUNTER	---------------	VC1 (100Hz)

ADJUSTMENT PROCEDURE & SPECIFICATION

STEP 1.

1. Turn the Power "OFF".
2. Open the Front Panel.
3. Remove the Front 2 P.C.B.
4. Connect the Extension Cable which is provided by Service Tool kit between Front 1 and Front 2.
5. Turn the Power "ON".
6. Connect the frequency counter to TP2 on Front 1.
7. Adjust VC1 so that the frequency counter indicates 100Hz (+/- 0.0001Hz).



MODULES

- Block Diagrams
- Schematic Diagrams
- Printed Circuit Boards

This section provides the block diagrams, schematic diagrams and printed circuit boards.

Note:

1. Do not use the part numbers shown on the schematic diagram or P.C.Board layout for ordering. The correct part number for ordering is shown in the Exploded View/Parts List section.
2. Unless otherwise specified, all resistors are in OHMS, K = 1,000 OHMS, all capacitors are in MICROFARADS (uF), P = uuF.
3. The foil paterns on the P.C.Board layout, printed with the blue color is the component side.
4. Please refer to the Electrical Parts List for the value and existance of component parts on the P.C.Board.

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NOTE:
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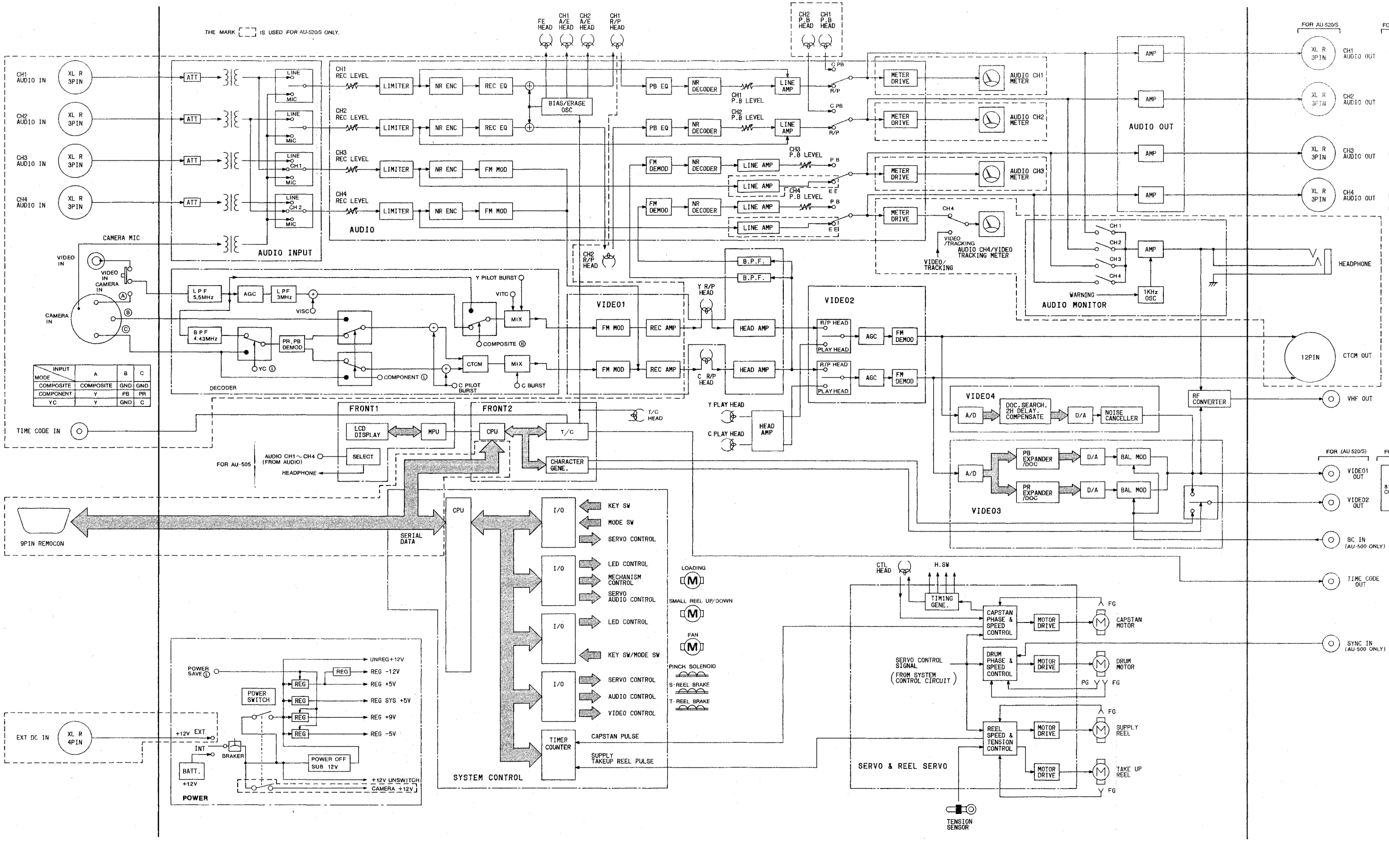
AU-520 S = USED FOR AU-520S ONLY
AU-520 = USED FOR AU-520 ONLY
AU-505 = USED FOR AU-505 ONLY

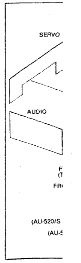
OVERALL BLOCK DIAGRAM

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

POV

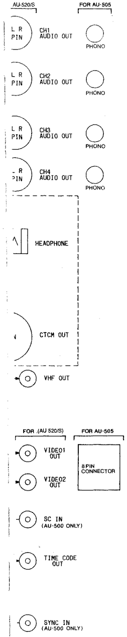

THE MARK [ ] IS USED FOR AU-520/S ONLY.
CH1 AUDIO IN
CH2 AUDIO IN
CH3 AUDIO IN
CH4 AUDIO IN
XL R 3PIN
ATT
LINE
MIC
CH1
CH2
CAMERA MIC
AUDIO INPUT
CH1 REC LEVEL
CH2 REC LEVEL
CH3 REC LEVEL
CH4 REC LEVEL
LIMITER
NR ENC
REC EQ
FM MOD
AUDIO
BIAS/ERASE OSC
FE HEAD
CH1 A/E HEAD
CH2 A/E HEAD
CH1 R/P HEAD
CH2 P.B HEAD
CH1 P.B HEAD
PB EQ
NR DECODER
CH1 P.B LEVEL
CH2 P.B LEVEL
CH3 P.B LEVEL
CH4 P.B LEVEL
LINE AMP
FM DEMOD
C PB
R/P
PB
EE
METER DRIVE
AUDIO CH1 METER
AUDIO CH2 METER
AUDIO CH3 METER
CH4
VIDEO /TRACKING
AUDIO CH4/VIDEO TRACKING METER
VIDEO/ TRACKING
AMP
AUDIO OUT
FOR AU-520/S
FOR AU-505
CH1 AUDIO OUT
CH2 AUDIO OUT
CH3 AUDIO OUT
CH4 AUDIO OUT
PHONO
CH1
CH2
CH3
CH4
WARNING
1KHz OSC
AUDIO MONITOR
HEADPHONE
VIDEO IN
VIDEO IN
CAMERA IN
CAMERA IN
Ⓐ
Ⓑ
Ⓒ
LPF 5.5MHz
AGC
LPF 3MHz
Y PILOT BURST
VITC
VISC
MIX
BPF 4.43MHz
PR, PB DEMOD
YC Ⓓ
COMPOSITE Ⓑ
CTCM
COMPONENT Ⓒ
C PILOT BURST
C BURST
DECODER
INPUT
MODE
A
B
C
COMPOSITE
COMPOSITE
GND
GND
COMPONENT
Y
PB
PR
YC
Y
GND
C
CH2 R/P HEAD
VIDEO1
FM MOD
REC AMP
Y R/P HEAD
C R/P HEAD
HEAD AMP
B.P.F.
VIDEO2
R/P HEAD
PLAY HEAD
AGC
FM DEMOD
12PIN
CTCM OUT
T/C HEAD
Y PLAY HEAD
C PLAY HEAD
HEAD AMP
VIDEO4
A/D
DOC.SEARCH. 2H DELAY. COMPENSATE
D/A
NOISE CANCELLER
RF CONVERTER
VHF OUT
PB EXPANDER /DOC
PR EXPANDER /DOC
BAL MOD
VIDEO3
FOR (AU 520/S)
FOR AU-505
VIDEO1 OUT
VIDEO2 OUT
8PIN CONNECTOR
SC IN (AU-500 ONLY)
TIME CODE OUT
SYNC IN (AU-500 ONLY)
TIME CODE IN
FRONT1
LCD DISPLAY
MPU
SELECT
AUDIO CH1～CH4 (FROM AUDIO)
HEADPHONE
FOR AU-505
FRONT2
CPU
T/C
CHARACTER GENE.
9PIN REMOCON
SERIAL DATA
CPU
I/O
KEY SW
MODE SW
SERVO CONTROL
LED CONTROL
MECHANISM CONTROL
SERVO AUDIO CONTROL
LED CONTROL
KEY SW/MODE SW
SERVO CONTROL
AUDIO CONTROL
VIDEO CONTROL
TIMER COUNTER
CAPSTAN PULSE
SUPPLY TAKEUP REEL PULSE
SYSTEM CONTROL
LOADING
SMALL REEL UP/DOWN
FAN
PINCH SOLENOID
S-REEL BRAKE
T-REEL BRAKE
M
CTL HEAD
H.SW
TIMING GENE.
CAPSTAN PHASE & SPEED CONTROL
DRUM PHASE & SPEED CONTROL
REEL SPEED & TENSION CONTROL
MOTOR DRIVE
SERVO CONTROL SIGNAL (FROM SYSTEM CONTROL CIRCUIT)
FG
PG
CAPSTAN MOTOR
DRUM MOTOR
SUPPLY REEL
TAKE UP REEL
SERVO & REEL SERVO
TENSION SENSOR
POWER SAVE Ⓓ
UNREG+12V
REG -12V
REG +5V
REG SYS +5V
REG +9V
REG -5V
REG
POWER SWITCH
EXT DC IN
XL R 4PIN
+12V EXT
INT
BRAKER
BATT.
+12V
POWER OFF SUB 12V
+12V UNSWITCH
CAMERA +12V
POWER

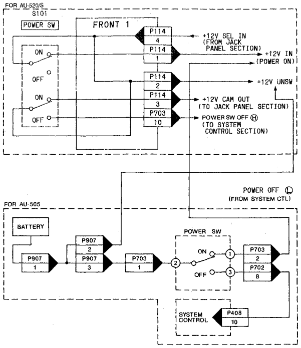
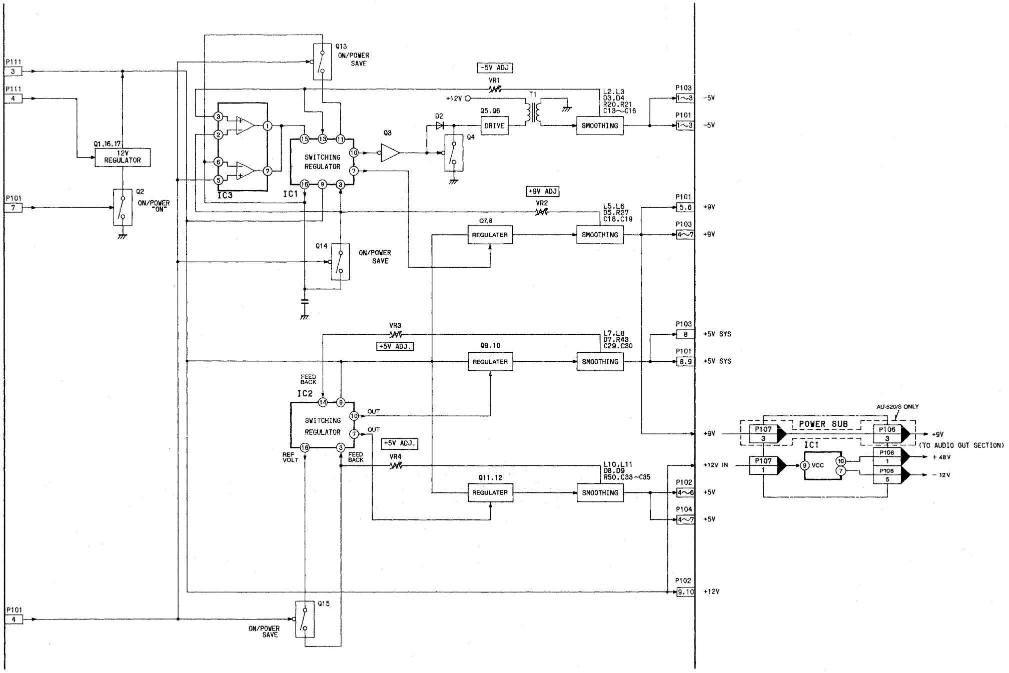
P.C. BOARD L


SERVO
AUDIO
(AU-520/S
(AU-

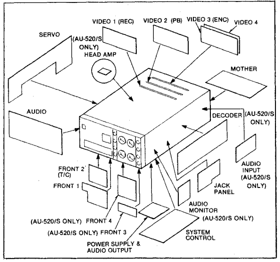
POWER SUPPLY BLOCK DIAGRAM

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

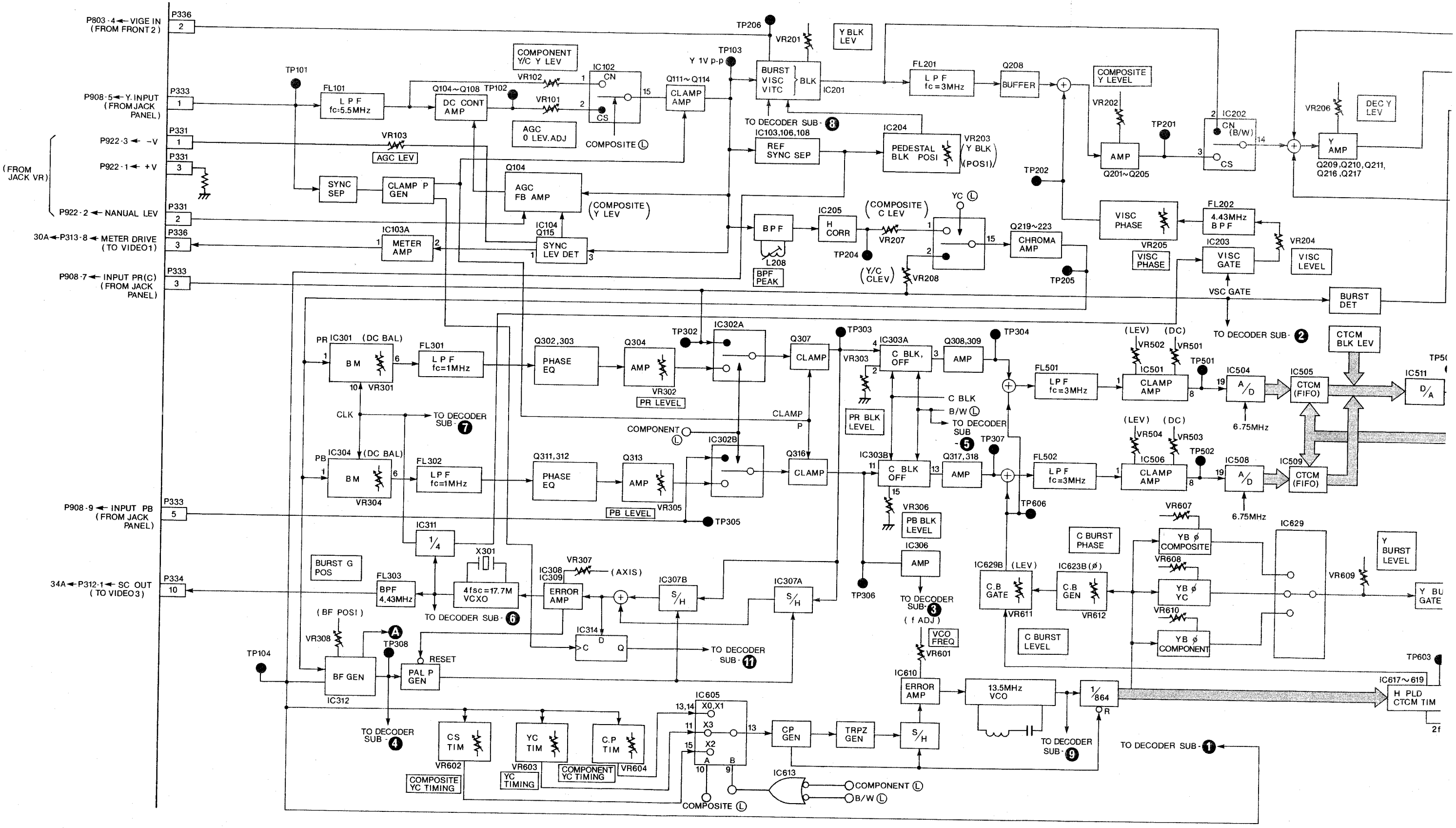

AU-520/S
FOR AU-505
L R PIN
CH1 AUDIO OUT
PHONO
L R PIN
CH2 AUDIO OUT
PHONO
L R PIN
CH3 AUDIO OUT
PHONO
R PIN
CH4 AUDIO OUT
PHONO
HEADPHONE
CTCM OUT
VHF OUT
FOR (AU 520/S)
FOR AU-505
VIDEO1 OUT
VIDEO2 OUT
8 PIN CONNECTOR
SC IN (AU-500 ONLY)
TIME CODE OUT
SYNC IN (AU-500 ONLY)



FOR AU-520/S
S101
POWER SW
FRONT 1
ON
OFF
ON
OFF
P114 4
P114 1
P114 2
P114 3
P703 10
+12V SEL IN (FROM JACK PANEL SECTION)
+12V IN (POWER ON)
+12V UNSW
+12V CAM OUT (TO JACK PANEL SECTION)
POWER SW OFF Ⓗ (TO SYSTEM CONTROL SECTION)
FOR AU-505
BATTERY
P907 1
P907 2
P907 3
P703 1
POWER SW
ON
OFF
P703 2
P702 8
SYSTEM CONTROL
P408 10
P111 3
P111 4
P101 7
POWER OFF Ⓛ (FROM SYSTEM CTL)
P101 4
POWER SAVE Ⓛ (FROM SYSTEM CTL)
Q1,16,17
12V REGULATOR
Q2
ON/POWER "ON"
Q13
ON/POWER SAVE
IC3
IC1
SWITCHING REGULATOR
Q14
ON/POWER SAVE
Q3
D2
Q4
Q5,Q6
DRIVE
+12V
T1
-5V ADJ
VR1
L2.L3 D3,D4 R20.R21 C13～C16
SMOOTHING
P103 1～3 -5V
P101 1～3 -5V
+9V ADJ
VR2
L5.L6 D5.R27 C18.C19
Q7,8
REGULATER
SMOOTHING
P101 5.6 +9V
P103 4～7 +9V
VR3
+5V ADJ.
L7.L8 D7,R43 C29.C30
Q9,10
REGULATER
SMOOTHING
P103 8 +5V SYS
P101 8.9 +5V SYS
FEED BACK
IC2
SWITCHING REGULATOR
OUT
OUT
REF VOLT
FEED BACK
+5V ADJ.
VR4
L10.L11 D8.D9 R50.C33～C35
Q11.12
REGULATER
SMOOTHING
P102 4～6 +5V
P104 4～7 +5V
P102 9.10 +12V
Q15
ON/POWER SAVE
AU-520/S ONLY
POWER SUB
+9V
P107 3
P106 3
+9V (TO AUDIO OUT SECTION)
+12V IN
P107 1
IC1
VCC
P106 1
+ 48V
P106 5
− 12V

P.C. BOARD LOCATION


VIDEO 1 (REC)
VIDEO 2 (PB)
VIDEO 3 (ENC)
VIDEO 4
SERVO
(AU-520/S ONLY)
HEAD AMP
MOTHER
AUDIO
DECODER (AU-520/S ONLY)
FRONT 2 (T/C)
FRONT 1
AUDIO INPUT (AU-520/S ONLY)
JACK PANEL
AUDIO MONITOR (AU-520/S ONLY)
(AU-520/S ONLY) FRONT 4
(AU-520/S ONLY) FRONT 3
SYSTEM CONTROL
POWER SUPPLY & AUDIO OUTPUT

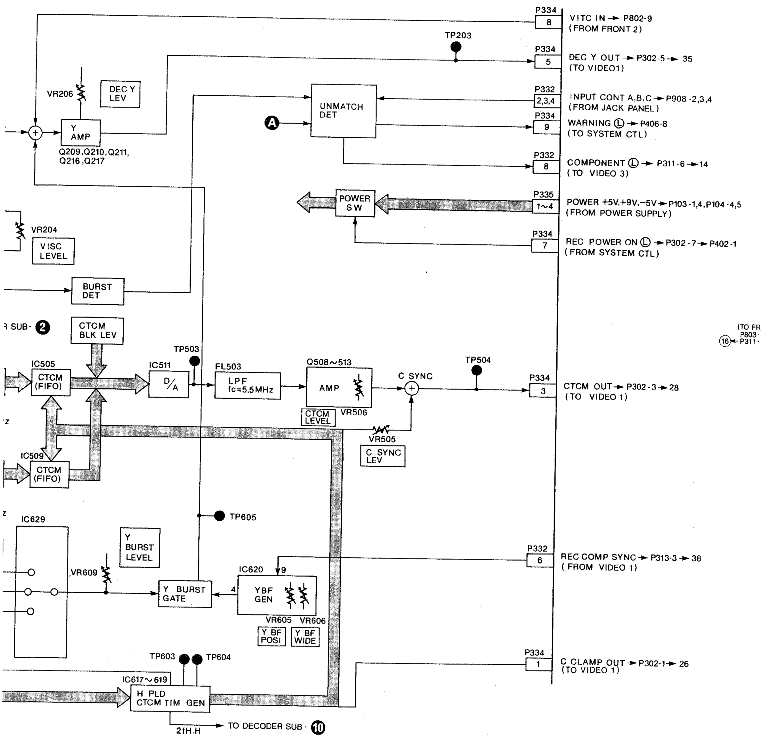
DECODER BLOCK DIAGRAM (FOR AU-520/S ONLY)

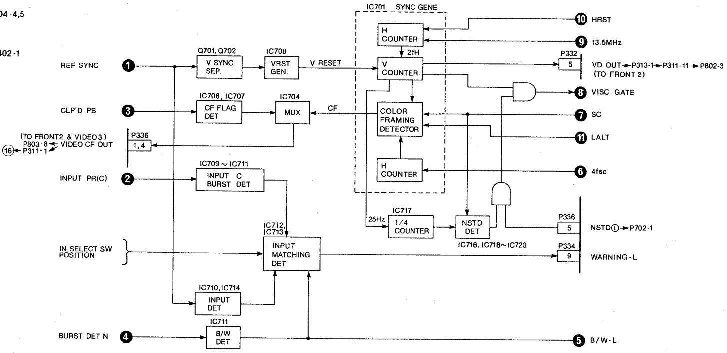

P803-4 ← VIGE IN (FROM FRONT 2)
P336 2
P908-5 ← Y. INPUT (FROM JACK PANEL)
P333 1
P922-3 ← −V
P331 1
P922-1 ← +V
P331 3
(FROM JACK VR)
P922-2 ← NANUAL LEV
P331 2
30A ← P313-8 ← METER DRIVE (TO VIDEO1)
P336 3
P908-7 ← INPUT PR(C) (FROM JACK PANEL)
P333 3
P908-9 ← INPUT PB (FROM JACK PANEL)
P333 5
34A ← P312-1 ← SC OUT (TO VIDEO3)
P334 10
TP101
FL101
L P F fc=5.5MHz
Q104~Q108
DC CONT AMP
TP102
COMPONENT Y/C Y LEV
VR102
VR101
IC102
CN
CS
AGC 0 LEV.ADJ
COMPOSITE Ⓛ
VR103
AGC LEV
Q111~Q114
CLAMP AMP
TP103
Y 1V p-p
TP206
VR201
BURST VISC VITC
BLK
IC201
Y BLK LEV
TO DECODER SUB-❽
IC103,106,108
REF SYNC SEP
IC204
PEDESTAL BLK POSI
VR203 (Y BLK POSI)
FL201
L P F fc=3MHz
Q208
BUFFER
COMPOSITE Y LEVEL
VR202
AMP
Q201~Q205
TP201
IC202
CN (B/W)
CS
VR206
DEC Y LEV
Y AMP
Q209,Q210,Q211, Q216,Q217
TP202
SYNC SEP
CLAMP P GEN
Q104
AGC FB AMP
(COMPOSITE Y LEV)
IC104 Q115
SYNC LEV DET
IC103A
METER AMP
BPF
L208
BPF PEAK
IC205
H CORR
(COMPOSITE C LEV)
VR207
TP204
(Y/C CLEV)
VR208
YC Ⓛ
Q219~223
CHROMA AMP
TP205
VISC PHASE
VR205
VISC PHASE
FL202
4.43MHz BPF
IC203
VISC GATE
VR204
VISC LEVEL
VSC GATE
BURST DET
TO DECODER SUB-❷
CTCM BLK LEV
PR IC301 (DC BAL)
BM
VR301
FL301
L P F fc=1MHz
Q302,303
PHASE EQ
Q304
AMP
VR302
PR LEVEL
TP302
IC302A
Q307
CLAMP
TP303
VR303
PR BLK LEVEL
IC303A
C BLK, OFF
Q308,309
AMP
TP304
C BLK
B/W Ⓛ
TO DECODER SUB -❺
FL501
L P F fc=3MHz
(LEV) (DC)
VR502
VR501
IC501
CLAMP AMP
TP501
IC504
A/D
6.75MHz
IC505
CTCM (FIFO)
IC511
D/A
CLK
TO DECODER SUB-❼
CLAMP
P
COMPONENT Ⓛ
IC302B
PB IC304 (DC BAL)
BM
VR304
FL302
L P F fc=1MHz
Q311,312
PHASE EQ
Q313
AMP
PB LEVEL
VR305
Q316
CLAMP
IC303B
C BLK OFF
VR306
PB BLK LEVEL
Q317,318
AMP
TP307
FL502
L P F fc=3MHz
(LEV) (DC)
VR504
VR503
IC506
CLAMP AMP
TP502
IC508
A/D
6.75MHz
IC509
CTCM (FIFO)
TP305
IC311
1/4
X301
BURST G POS
FL303
BPF 4.43MHz
4fsc=17.7M VCXO
TO DECODER SUB-❻
IC308 IC309
ERROR AMP
VR307
(AXIS)
IC307B
S/H
IC307A
S/H
TP306
IC306
AMP
TO DECODER SUB-❸ (f ADJ)
TP606
C BURST PHASE
VR607
YB φ COMPOSITE
VR608
YB φ YC
VR610
YB φ COMPONENT
IC629
VR609
Y BURST LEVEL
Y BU GATE
IC629B (LEV)
C.B GATE
VR611
IC623B (φ)
C.B GEN
VR612
C BURST LEVEL
(BF POSI)
VR308
Ⓐ
TP308
TP104
BF GEN
IC312
PAL P GEN
RESET
IC314
D
C
Q
TO DECODER SUB-⓫
TO DECODER SUB-❹
CS TIM
VR602
COMPOSITE YC TIMING
YC TIM
VR603
YC TIMING
C.P TIM
VR604
COMPONENT YC TIMING
IC605
X0,X1
X3
X2
A
B
IC613
COMPONENT Ⓛ
B/W Ⓛ
COMPOSITE Ⓛ
CP GEN
TRPZ GEN
S/H
VCO FREQ
VR601
IC610
ERROR AMP
13.5MHz VCO
1/864
R
TO DECODER SUB-❾
TO DECODER SUB-❶
TP603
IC617~619
H PLD CTCM TIM

REVERSE SIDE

OVERALL, POWER SUPPLY BLOCK DIAGRAM

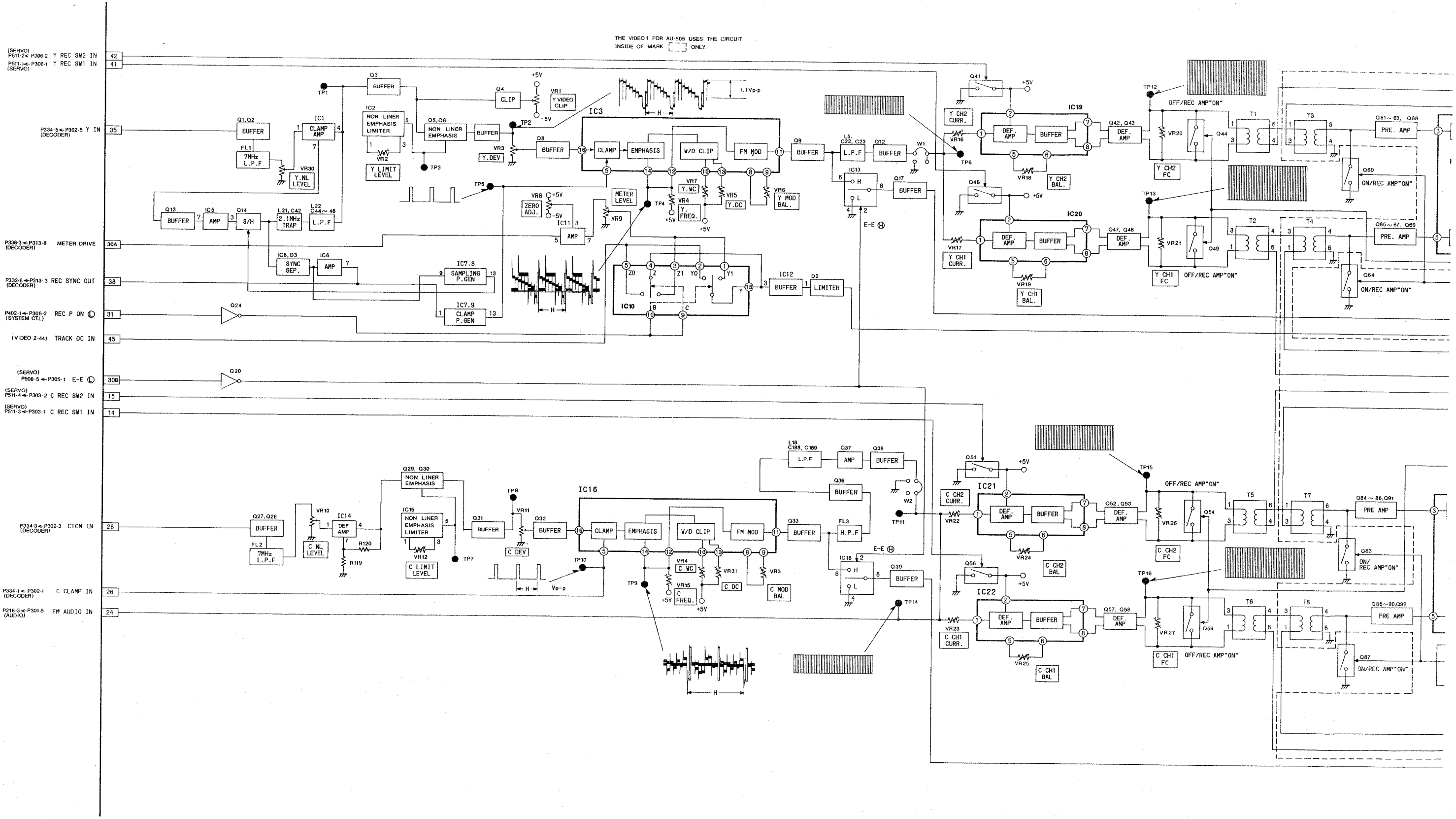
DECODER SUB (1) BLOCK DIAGRAM (FOR AU-520/S ONLY)


P334
8
VITC IN → P802-9
(FROM FRONT 2)
TP203
P334
5
DEC Y OUT → P302-5 → 35
(TO VIDEO1)
VR206
DEC Y LEV
Y AMP
Q209,Q210,Q211,
Q216,Q217
UNMATCH DET
A
P332
2,3,4
INPUT CONT A,B,C → P908-2,3,4
(FROM JACK PANEL)
P334
9
WARNING Ⓛ → P406-8
(TO SYSTEM CTL)
P332
8
COMPONENT Ⓛ → P311-6 → 14
(TO VIDEO 3)
POWER SW
P335
1~4
POWER +5V,+9V,−5V → P103-1,4,P104-4,5
(FROM POWER SUPPLY)
P334
7
REC POWER ON Ⓛ → P302-7 → P402-1
(FROM SYSTEM CTL)
VR204
VISC LEVEL
BURST DET
SUB- 2
CTCM BLK LEV
IC505
CTCM (FIFO)
IC511
D/A
TP503
FL503
LPF fc=5.5MHz
Q508~513
AMP
CTCM LEVEL
VR506
C SYNC
TP504
P334
3
CTCM OUT → P302-3 → 28
(TO VIDEO 1)
VR505
C SYNC LEV
IC509
CTCM (FIFO)
TP605
IC629
VR609
Y BURST LEVEL
Y BURST GATE
IC620
9
4
YBF GEN
VR605
VR606
Y BF POSI
Y BF WIDE
P332
6
REC COMP SYNC → P313-3 → 38
(FROM VIDEO 1)
TP603
TP604
IC617~619
H PLD CTCM TIM GEN
2fH.H
TO DECODER SUB - 10
P334
1
C CLAMP OUT → P302-1 → 26
(TO VIDEO 1)


REF SYNC
1
Q701, Q702
V SYNC SEP.
IC708
VRST GEN.
V RESET
IC701 SYNC GENE
H COUNTER
2fH
V COUNTER
COLOR FRAMING DETECTOR
H COUNTER
10 HRST
9 13.5MHz
P332
5
VD OUT → P313-1 → P311-11 → P802-3
(TO FRONT 2)
8 VISC GATE
7 SC
11 LALT
6 4fsc
CLP'D PB
3
IC706, IC707
CF FLAG DET
IC704
MUX
CF
(TO FRONT2 & VIDEO3)
P803-8 ← VIDEO CF OUT
(16) ← P311-1
P336
1,4
INPUT PR(C)
2
IC709 ~ IC711
INPUT C BURST DET
IC717
25Hz
1/4 COUNTER
NSTD DET
IC716, IC718~IC720
P336
5
NSTDⓁ → P702-1
IC712, IC713
IN SELECT SW POSITION
INPUT MATCHING DET
P334
9
WARNING-L
IC710, IC714
INPUT DET
IC711
BURST DET N
4
B/W DET
5 B/W-L

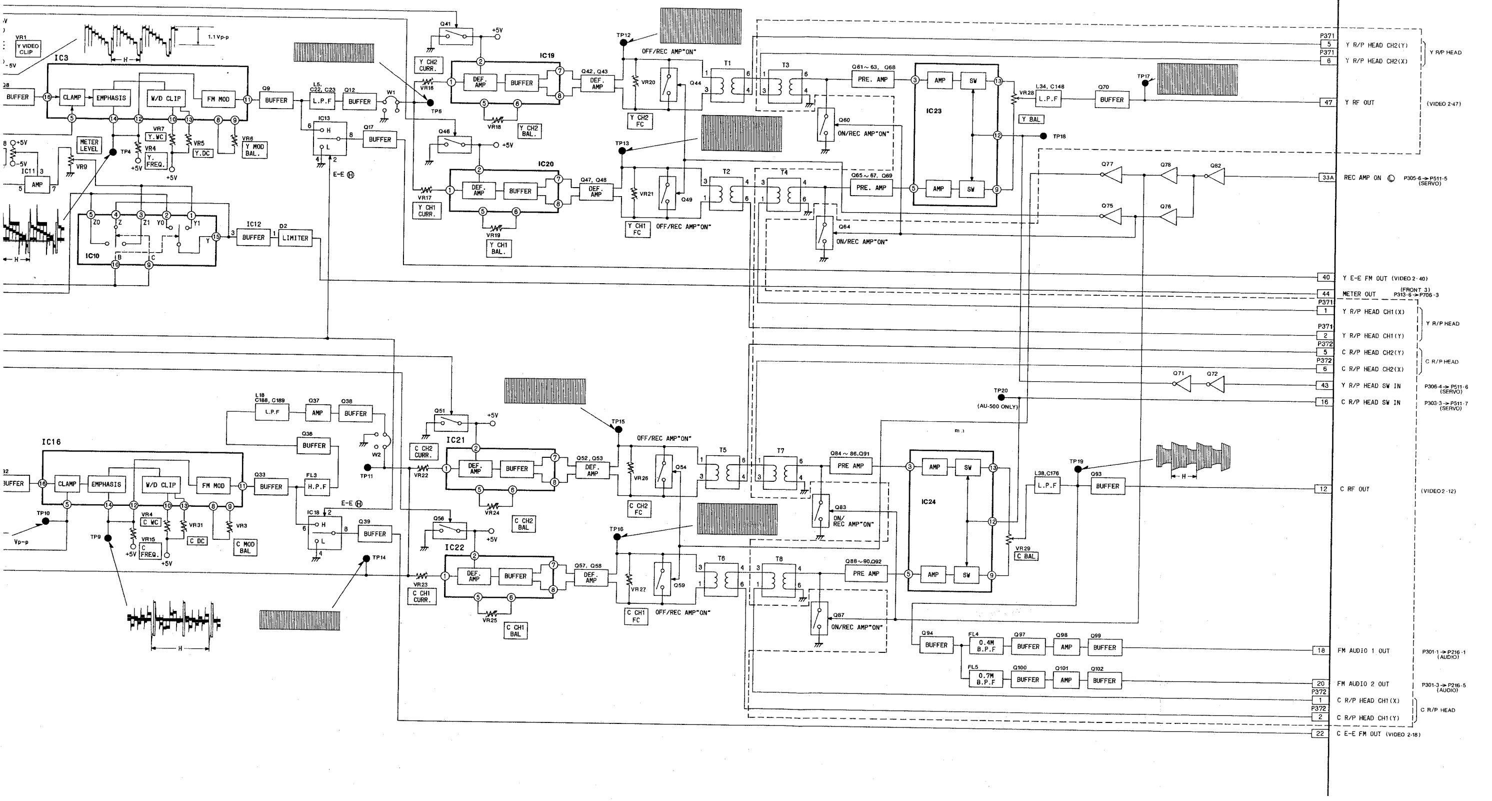
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

VIDEO 1 BLOCK DIAGRAM


THE VIDEO1 FOR AU-505 USES THE CIRCUIT INSIDE OF MARK [ ] ONLY.
(SERVO) P511-2←P306-2 Y REC SW2 IN 42
P511-1←P306-1 Y REC SW1 IN 41 (SERVO)
P334-5←P302-5 Y IN 35 (DECODER)
P336-3←P313-8 METER DRIVE 30A (DECODER)
P332-6←P313-3 REC SYNC OUT 38 (DECODER)
P402-1←P305-2 REC P ON Ⓛ 31 (SYSTEM CTL)
(VIDEO 2-44) TRACK DC IN 45
(SERVO) P508-5←P305-1 E-E Ⓛ 30B
(SERVO) P511-4←P303-2 C REC SW2 IN 15
(SERVO) P511-3←P303-1 C REC SW1 IN 14
P334-3←P302-3 CTCM IN 28 (DECODER)
P334-1←P302-1 C CLAMP IN 26 (DECODER)
P216-3←P301-5 FM AUDIO IN 24 (AUDIO)
Q1,Q2 BUFFER
FL1 7MHz L.P.F
VR30 Y.NL LEVEL
IC1 CLAMP AMP
TP1
Q3 BUFFER
IC2 NON LINER EMPHASIS LIMITER
VR2 Y LIMIT LEVEL
Q4 CLIP
VR1 Y VIDEO CLIP
+5V
-5V
Q5,Q6 NON LINER EMPHASIS
BUFFER
TP2
TP3
VR3 Y.DEV
Q8 BUFFER
Q13 BUFFER
IC5 AMP
Q14 S/H
L21, C42 2.1MHz TRAP
L22 C44～46 L.P.F
IC6, D3 SYNC SEP.
IC6 AMP
IC7.8 SAMPLING P.GEN
IC7.9 CLAMP P.GEN
Q24
Q20
TP5
VR8 ZERO ADJ.
IC11 AMP
METER LEVEL
VR9
TP4
1.1Vp-p
H
IC3
CLAMP
EMPHASIS
W/D CLIP
FM MOD
VR7 Y.WC
VR4 Y. FREQ.
VR5 Y.DC
VR6 Y MOD BAL.
IC10
Z0 Z Z1 Y0 Y1 Y B C
IC12 BUFFER
D2 LIMITER
Q9 BUFFER
L5, C22, C23 L.P.F
Q12 BUFFER
W1
TP6
IC13 H L
Q17 BUFFER
E-E Ⓗ
Q41
Q46
Y CH2 CURR.
VR16
Y CH1 CURR.
VR17
IC19
DEF. AMP
BUFFER
VR18 Y CH2 BAL.
IC20
VR19 Y CH1 BAL.
Q42, Q43 DEF. AMP
Q47, Q48 DEF. AMP
TP12
TP13
OFF/REC AMP"ON"
VR20 Y CH2 FC
VR21 Y CH1 FC
Q44
Q49
T1 T2 T3 T4
Q60 ON/REC AMP"ON"
Q64 ON/REC AMP"ON"
Q61～63, Q68 PRE. AMP
Q65～67, Q69 PRE. AMP
Q27,Q28 BUFFER
FL2 7MHz L.P.F
VR10 C NL LEVEL
IC14 DEF AMP
R120
R119
Q29, Q30 NON LINER EMPHASIS
IC15 NON LINER EMPHASIS LIMITER
VR12 C LIMIT LEVEL
TP7
Q31 BUFFER
TP8
VR11 C DEV
Q32 BUFFER
TP10
Vp-p
IC16
CLAMP
EMPHASIS
W/D CLIP
FM MOD
VR4 C WC
VR15 C FREQ.
VR31 C DC
VR3 C MOD BAL
TP9
L18 C188, C189 L.P.F
Q37 AMP
Q38 BUFFER
Q36 BUFFER
W2
Q33 BUFFER
FL3 H.P.F
TP11
IC18 H L
Q39 BUFFER
TP14
Q51
Q56
IC21
IC22
C CH2 CURR.
VR22
C CH1 CURR.
VR23
VR24 C CH2 BAL
VR25 C CH1 BAL
Q52, Q53 DEF. AMP
Q57, Q58 DEF. AMP
TP15
TP16
VR26 C CH2 FC
VR 27 C CH1 FC
Q54
Q59
T5 T6 T7 T8
Q83 ON/ REC AMP"ON"
Q87 ON/REC AMP"ON"
Q84～86,Q91 PRE AMP
Q88～90,Q92 PRE AMP

VIDEO 1
BLOCK DIAGRAM

THE VIDEO 1 FOR AU-505 USES THE CIRCUIT INSIDE OF MARK [ ] ONLY.

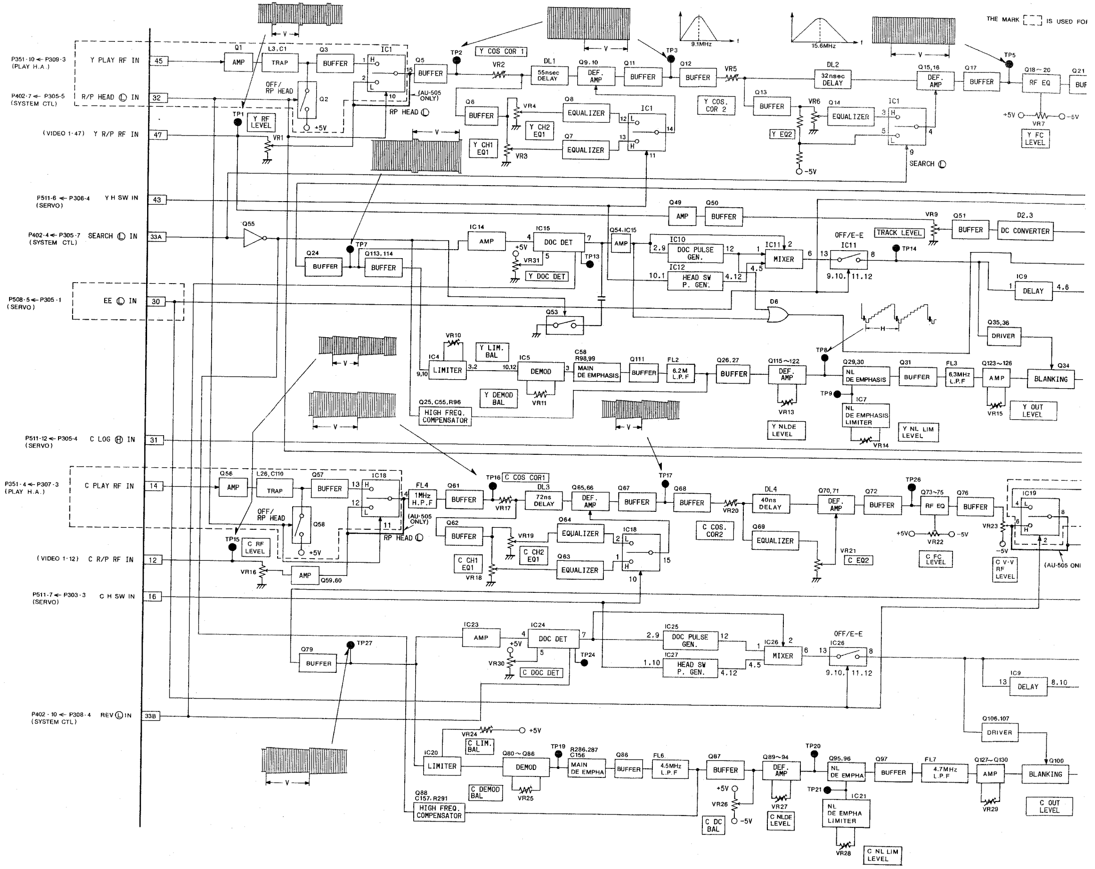


VR1
Y VIDEO CLIP
1.1Vp-p
IC3
BUFFER
CLAMP
EMPHASIS
W/D CLIP
FM MOD
-5V
+5V
VR7
Y.WC
VR4
Y. FREQ.
VR5
Y.DC
VR6
Y MOD BAL.
METER LEVEL
TP4
VR9
IC11
AMP
IC10
Z0
Z
Z1
Y0
Y1
Y
B
C
IC12
BUFFER
D2
LIMITER
Q9
BUFFER
L5, C22, C23
L.P.F
Q12
BUFFER
W1
TP6
IC13
H
L
Q17
BUFFER
E-E H
Q41
+5V
Y CH2 CURR.
VR18
IC19
DEF. AMP
BUFFER
Y CH2 BAL.
Q42, Q43
DEF. AMP
TP12
OFF/REC AMP"ON"
VR20
Q44
Y CH2 FC
T1
T3
Q46
VR17
Y CH1 CURR.
IC20
VR19
Y CH1 BAL.
Q47, Q48
DEF. AMP
TP13
VR21
Q49
Y CH1 FC
OFF/REC AMP"ON"
T2
T4
Q60
ON/REC AMP"ON"
Q64
ON/REC AMP"ON"
Q61~63, Q68
PRE. AMP
Q65~67, Q69
PRE. AMP
IC23
AMP
SW
VR28
Y BAL
L34, C148
L.P.F
Q70
BUFFER
TP17
TP18
Q77
Q78
Q82
Q75
Q76
P371
5
Y R/P HEAD CH2(Y)
6
Y R/P HEAD CH2(X)
Y R/P HEAD
47
Y RF OUT
(VIDEO 2-47)
33A
REC AMP ON L
P305-6 → P511-5 (SERVO)
40
Y E-E FM OUT (VIDEO 2-40)
44
METER OUT
(FRONT 3) P313-6 → P706-3
1
Y R/P HEAD CH1(X)
2
Y R/P HEAD CH1(Y)
P372
C R/P HEAD CH2(Y)
C R/P HEAD CH2(X)
C R/P HEAD
Q71
Q72
43
Y R/P HEAD SW IN
P306-4 → P511-6 (SERVO)
TP20
(AU-500 ONLY)
16
C R/P HEAD SW IN
P303-3 → P511-7 (SERVO)
L18 C188, C189
L.P.F
Q37
AMP
Q38
BUFFER
Q36
BUFFER
IC16
BUFFER
CLAMP
EMPHASIS
W/D CLIP
FM MOD
Q33
BUFFER
FL3
H.P.F
TP10
Vp-p
TP9
VR4
C WC
VR15
C FREQ.
VR31
C DC
VR3
C MOD BAL
IC18
E-E H
Q39
BUFFER
TP11
W2
TP14
Q51
+5V
C CH2 CURR.
VR22
IC21
DEF. AMP
BUFFER
VR24
C CH2 BAL
Q52, Q53
DEF. AMP
TP15
OFF/REC AMP"ON"
VR26
Q54
C CH2 FC
T5
T7
Q56
VR23
C CH1 CURR.
IC22
VR25
C CH1 BAL
Q57, Q58
DEF. AMP
TP16
VR27
Q59
C CH1 FC
OFF/REC AMP"ON"
T6
T8
Q83
ON/ REC AMP"ON"
Q87
ON/REC AMP"ON"
Q84~86, Q91
PRE AMP
Q88~90, Q92
PRE AMP
IC24
AMP
SW
VR29
C BAL
L38, C176
L.P.F
TP19
Q93
BUFFER
H
12
C RF OUT
(VIDEO 2-12)
Q94
BUFFER
FL4
0.4M B.P.F
Q97
BUFFER
Q98
AMP
Q99
BUFFER
18
FM AUDIO 1 OUT
P301-1 → P216-1 (AUDIO)
FL5
0.7M B.P.F
Q100
BUFFER
Q101
AMP
Q102
BUFFER
20
FM AUDIO 2 OUT
P301-3 → P216-5 (AUDIO)
C R/P HEAD CH1(X)
C R/P HEAD CH1(Y)
C R/P HEAD
22
C E-E FM OUT (VIDEO 2-18)

REVERSE SIDE

VIDEO 2
BLOCK DIAGRAM

VIDEO 2 BLOCK DIAGRAM



THE MARK [ ] IS USED FO
P351-10 ← P309-3 (PLAY H.A.)
Y PLAY RF IN
45
P402-7 ← P305-5 (SYSTEM CTL)
R/P HEAD Ⓛ IN
32
(VIDEO 1-47) Y R/P RF IN
47
P511-6 ← P306-4 (SERVO)
Y H SW IN
43
P402-4 ← P305-7 (SYSTEM CTL)
SEARCH Ⓛ IN
33A
P508-5 ← P305-1 (SERVO)
EE Ⓛ IN
30
P511-12 ← P305-4 (SERVO)
C LOG Ⓗ IN
31
P351-4 ← P307-3 (PLAY H.A.)
C PLAY RF IN
14
(VIDEO 1-12) C R/P RF IN
12
P511-7 ← P303-3 (SERVO)
C H SW IN
16
P402-10 ← P308-4 (SYSTEM CTL)
REV Ⓛ IN
33B
Q1 AMP
L3, C1 TRAP
Q3 BUFFER
IC1
OFF/RP HEAD
Q2
+5V
TP1
Y RF LEVEL
VR1
(AU-505 ONLY)
RP HEAD Ⓛ
Q5 BUFFER
TP2
Y COS COR 1
VR2
DL1 55nsec DELAY
Q9,10 DEF. AMP
Q11 BUFFER
TP3
Q12 BUFFER
VR5
9.1MHz
15.6MHz
DL2 32nsec DELAY
Q15,16 DEF. AMP
Q17 BUFFER
TP5
Q18~20 RF EQ
Q21 BUF
+5V
VR7
-5V
Y FC LEVEL
Q6 BUFFER
VR4
Q8 EQUALIZER
Y CH2 EQ1
Y CH1 EQ1
VR3
Q7 EQUALIZER
Y COS. COR 2
Q13 BUFFER
VR6
Q14 EQUALIZER
Y EQ2
-5V
SEARCH Ⓛ
V
Q49 AMP
Q50 BUFFER
VR9
TRACK LEVEL
Q51 BUFFER
D2,3 DC CONVERTER
Q55
IC14 AMP
IC15 DOC DET
+5V
VR31
Y DOC DET
TP13
Q54, IC15 AMP
IC10 DOC PULSE GEN.
IC12 HEAD SW P. GEN.
IC11 MIXER
OFF/E-E IC11
TP14
Q24 BUFFER
TP7
Q113,114 BUFFER
IC9 DELAY
Q53
D6
TP8
H
Q35,36 DRIVER
VR10
IC4 LIMITER
Y LIM. BAL
IC5 DEMOD
C58 R98,99 MAIN DE EMPHASIS
Q111 BUFFER
FL2 6.2M L.P.F
Q26,27 BUFFER
Q115~122 DEF. AMP
Q29,30 NL DE EMPHASIS
Q31 BUFFER
FL3 6.3MHz L.P.F
Q123~126 AMP
Q34 BLANKING
Y DEMOD BAL
VR11
Q25, C55, R96 HIGH FREQ. COMPENSATOR
VR13
Y NLDE LEVEL
TP9
IC7 NL DE EMPHASIS LIMITER
VR14
Y NL LIM LEVEL
VR15
Y OUT LEVEL
Q56 AMP
L26, C110 TRAP
Q57 BUFFER
IC18
OFF/RP HEAD
Q58
+5V
TP15
C RF LEVEL
VR16
AMP Q59,60
TP16
C COS COR1
FL4 1MHz H.P.F
Q61 BUFFER
VR17
DL3 72ns DELAY
Q65,66 DEF. AMP
Q67 BUFFER
TP17
Q68 BUFFER
VR20
DL4 40ns DELAY
Q70,71 DEF. AMP
Q72 BUFFER
TP26
Q73~75 RF EQ
Q76 BUFFER
IC19
VR23
(AU-505 ONLY)
RP HEAD Ⓛ
Q62 BUFFER
VR19
Q64 EQUALIZER
C CH2 EQ1
C CH1 EQ1
VR18
Q63 EQUALIZER
C COS. COR2
Q69 EQUALIZER
VR21
C EQ2
+5V
VR22
-5V
C FC LEVEL
C V-V RF LEVEL
(AU-505 ONL
IC23 AMP
IC24 DOC DET
+5V
VR30
C DOC DET
TP24
IC25 DOC PULSE GEN.
IC27 HEAD SW P. GEN.
IC26 MIXER
OFF/E-E IC26
Q79 BUFFER
TP27
IC9 DELAY
Q106,107 DRIVER
VR24
+5V
C LIM. BAL
IC20 LIMITER
Q80~Q86 DEMOD
TP19
R286,287 C156 MAIN DE EMPHA
Q86 BUFFER
FL6 4.5MHz L.P.F
Q87 BUFFER
Q89~94 DEF. AMP
TP20
Q95,96 NL DE EMPHA
Q97 BUFFER
FL7 4.7MHz L.P.F
Q127~Q130 AMP
Q100 BLANKING
C DEMOD BAL
VR25
Q88 C157, R291 HIGH FREQ. COMPENSATOR
+5V
VR26
-5V
C DC BAL
VR27
C NLDE LEVEL
TP21
IC21 NL DE EMPHA LIMITER
VR28
C NL LIM LEVEL
VR29
C OUT LEVEL

M

NOTE:
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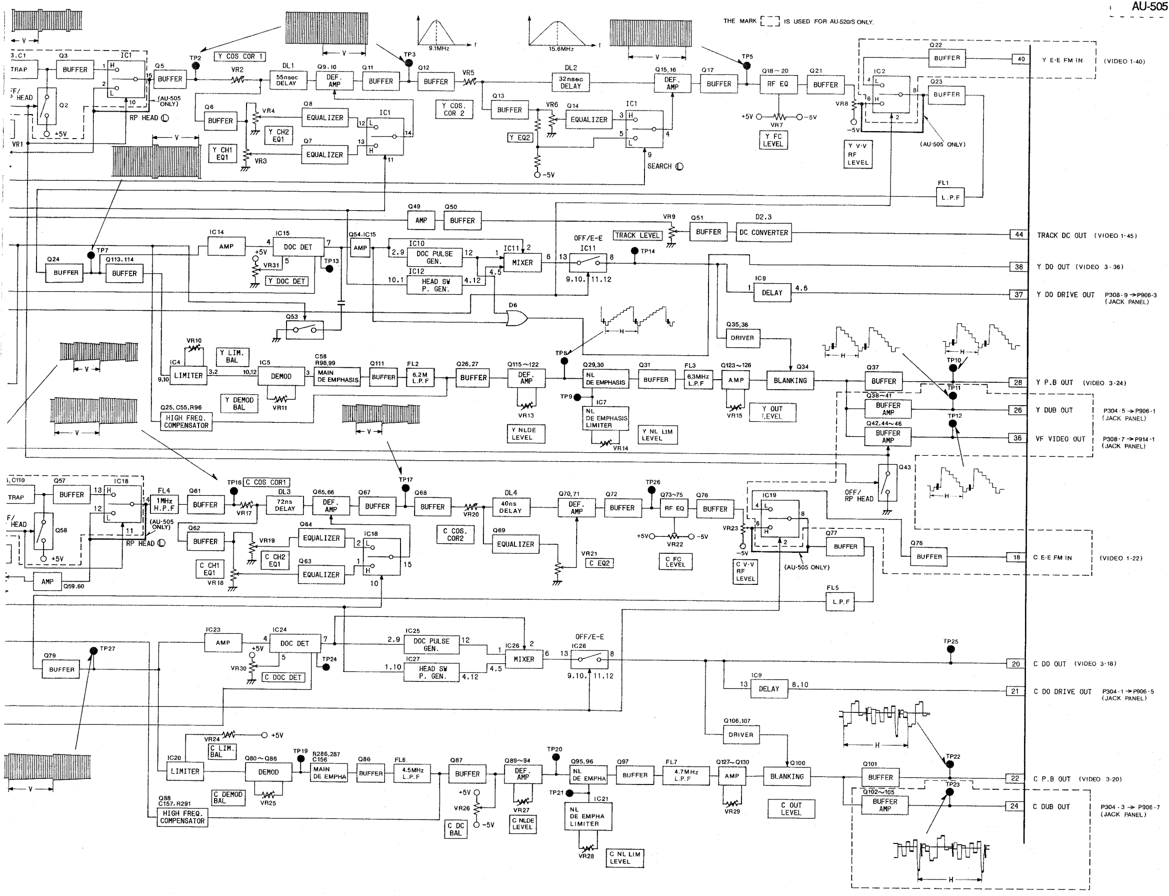

THE MARK [ ] IS USED FOR AU-520/S ONLY.
TRAP
Q3 BUFFER
IC1
Q2
+5V
VR1
(AU-505 ONLY)
RP HEAD
Q5 BUFFER
TP2
Y COS COR 1
VR2
DL1 55nsec DELAY
Q9,10 DEF. AMP
Q11 BUFFER
TP3
Q12 BUFFER
VR5
9.1MHz
15.6MHz
DL2 32nsec DELAY
Q15,16 DEF. AMP
Q17 BUFFER
TP5
Q18～20 RF EQ
Q21 BUFFER
+5V
-5V
VR7
Y FC LEVEL
VR8
Y V-V RF LEVEL
IC2
Q22 BUFFER
Q23 BUFFER
(AU-505 ONLY)
40 Y E-E FM IN (VIDEO 1-40)
Q6 BUFFER
VR4
Q8 EQUALIZER
Q7 EQUALIZER
Y CH2 EQ1
Y CH1 EQ1
VR3
Y COS. COR 2
Q13 BUFFER
VR6
Q14 EQUALIZER
Y EQ2
SEARCH
FL1 L.P.F
Q49 AMP
Q50 BUFFER
VR9
Q51 BUFFER
D2,3 DC CONVERTER
TRACK LEVEL
44 TRACK DC OUT (VIDEO 1-45)
IC14 AMP
IC15 DOC DET
VR31
Y DOC DET
TP13
Q54,IC15 AMP
IC10 DOC PULSE GEN.
IC12 HEAD SW P. GEN.
IC11 MIXER
OFF/E-E
IC11
TP14
38 Y DO OUT (VIDEO 3-36)
IC9 DELAY
37 Y DO DRIVE OUT P308-9 → P906-3 (JACK PANEL)
Q24 BUFFER
TP7
Q113,114 BUFFER
D6
Q53
VR10
Y LIM. BAL
IC4 LIMITER
IC5 DEMOD
C58 R98,99 MAIN DE EMPHASIS
Q111 BUFFER
FL2 6.2M L.P.F
Q26,27 BUFFER
Q115～122 DEF. AMP
TP8
Q29,30 NL DE EMPHASIS
Q31 BUFFER
FL3 6.3MHz L.P.F
Q123～126 AMP
Q35,36 DRIVER
Q34 BLANKING
Q37 BUFFER
TP10
TP11
28 Y P.B OUT (VIDEO 3-24)
Y DEMOD BAL
VR11
Q25,C55,R96 HIGH FREQ. COMPENSATOR
VR13
Y NLDE LEVEL
TP9
IC7 NL DE EMPHASIS LIMITER
VR14
Y NL LIM LEVEL
VR15
Y OUT LEVEL
Q38～41 BUFFER AMP
TP12
26 Y DUB OUT P304-5 → P906-1 (JACK PANEL)
Q42,44～46 BUFFER AMP
36 VF VIDEO OUT P308-7 → P914-1 (JACK PANEL)
Q43
OFF/ RP HEAD
Q57 BUFFER
IC18
FL4 1MHz H.P.F
Q61 BUFFER
TP16
C COS COR1
VR17
DL3 72ns DELAY
Q65,66 DEF. AMP
Q67 BUFFER
TP17
Q68 BUFFER
VR20
DL4 40ns DELAY
Q70,71 DEF. AMP
Q72 BUFFER
TP26
Q73～75 RF EQ
Q76 BUFFER
IC19
VR23
C V-V RF LEVEL
(AU-505 ONLY)
Q77 BUFFER
Q78 BUFFER
18 C E-E FM IN (VIDEO 1-22)
Q58
Q62 BUFFER
VR19
Q64 EQUALIZER
Q63 EQUALIZER
C CH2 EQ1
C CH1 EQ1
VR18
C COS. COR2
Q69 EQUALIZER
VR21
C EQ2
VR22
C FC LEVEL
FL5 L.P.F
Q59,60 AMP
IC23 AMP
IC24 DOC DET
VR30
C DOC DET
TP24
IC25 DOC PULSE GEN.
IC27 HEAD SW P. GEN.
IC26 MIXER
OFF/E-E IC26
TP25
20 C DO OUT (VIDEO 3-18)
IC9 DELAY
21 C DO DRIVE OUT P304-1 → P906-5 (JACK PANEL)
Q79 BUFFER
TP27
Q106,107 DRIVER
VR24
C LIM. BAL
IC20 LIMITER
Q80～Q86 DEMOD
TP19
R286,287 C156 MAIN DE EMPHA
Q86 BUFFER
FL6 4.5MHz L.P.F
Q87 BUFFER
Q89～94 DEF. AMP
TP20
Q95,96 NL DE EMPHA
Q97 BUFFER
FL7 4.7MHz L.P.F
Q127～Q130 AMP
Q100 BLANKING
Q101 BUFFER
TP22
22 C P.B OUT (VIDEO 3-20)
C DEMOD BAL
VR25
Q88 C157,R291 HIGH FREQ. COMPENSATOR
VR26
C DC BAL
VR27
C NLDE LEVEL
TP21
IC21 NL DE EMPHA LIMITER
VR28
C NL LIM LEVEL
VR29
C OUT LEVEL
Q102～105 BUFFER AMP
TP23
24 C DUB OUT P304-3 → P906-7 (JACK PANEL)
V
H

VIDEO 3 BLOCK DIAGRAM

NOTE:
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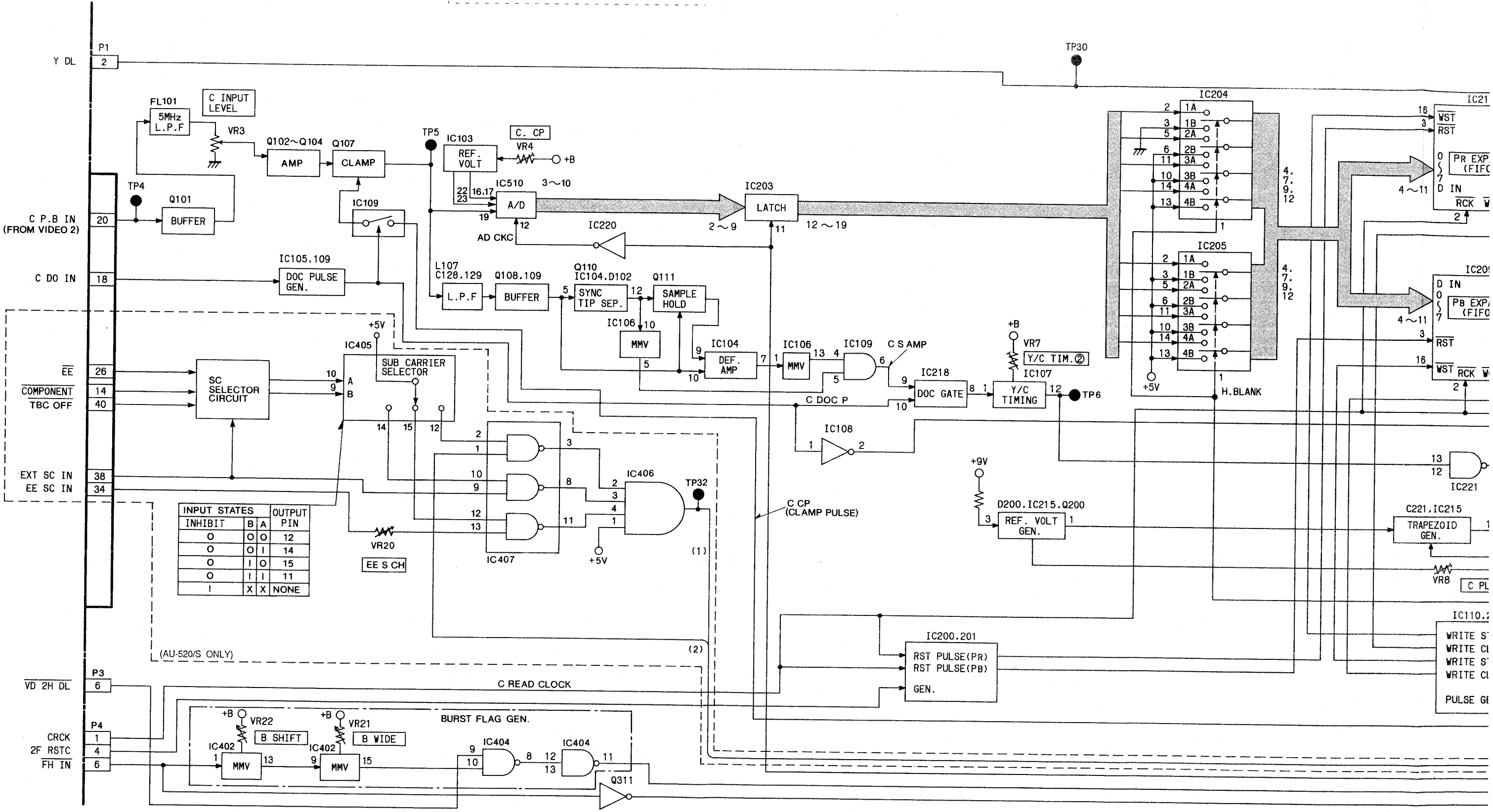
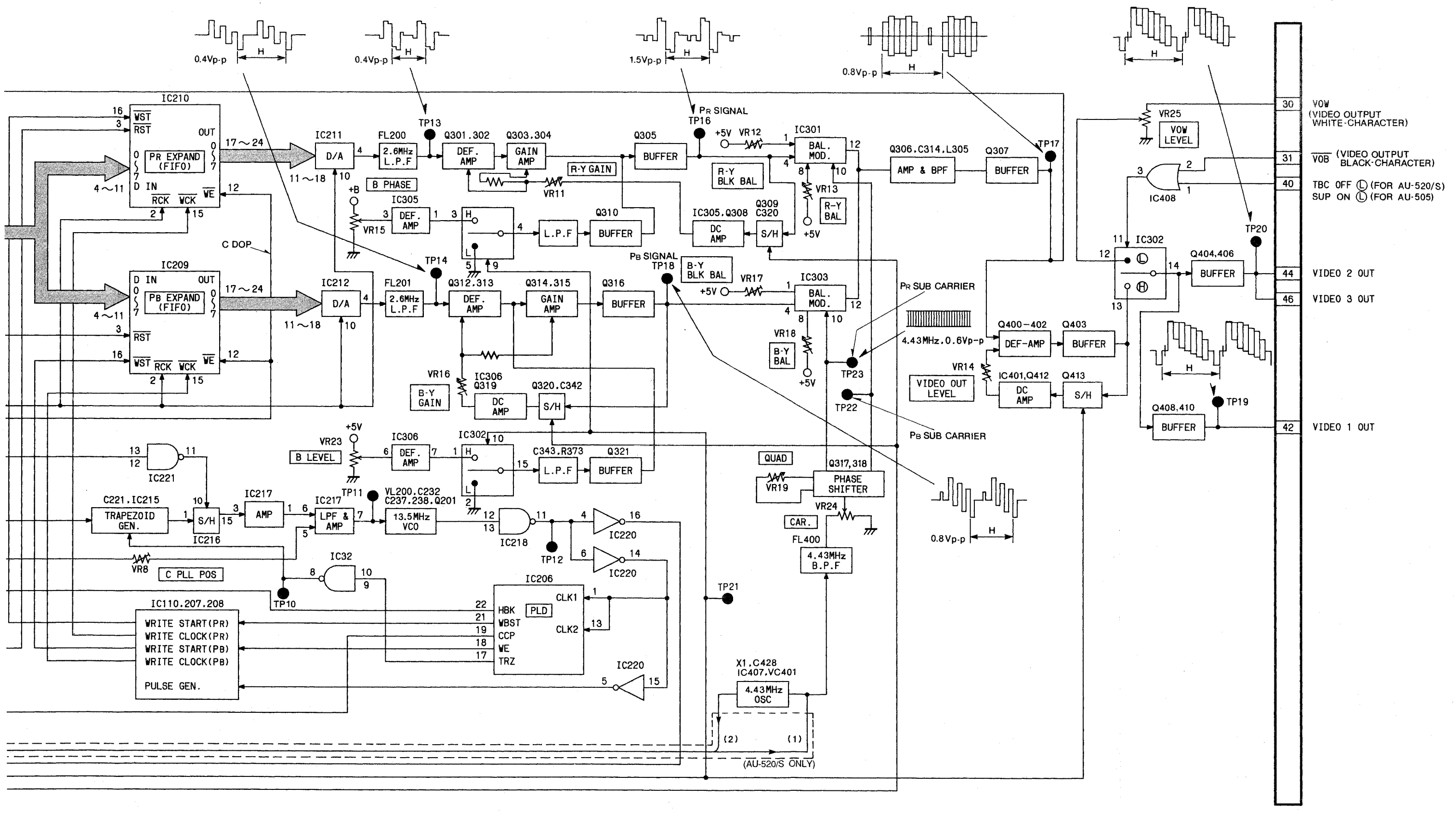


Y DL
P1
2
TP30
FL101
5MHz L.P.F
C INPUT LEVEL
VR3
Q102~Q104
AMP
Q107
CLAMP
TP5
IC103
REF. VOLT
C. CP
VR4
+B
IC510
3~10
A/D
22
23
16,17
19
12
AD CKC
IC109
IC220
IC203
LATCH
2~9
12~19
11
TP4
Q101
BUFFER
C P.B IN (FROM VIDEO 2)
20
C DO IN
18
IC105.109
DOC PULSE GEN.
L107
C128.129
L.P.F
Q108.109
BUFFER
Q110
IC104.D102
SYNC TIP SEP.
Q111
SAMPLE HOLD
IC106
MMV
IC104
DEF. AMP
IC106
MMV
IC109
C S AMP
IC218
DOC GATE
+B
VR7
Y/C TIM.②
IC107
Y/C TIMING
TP6
C DOC P
IC108
+5V
IC405
SUB CARRIER SELECTOR
EE
26
COMPONENT
14
TBC OFF
40
SC SELECTOR CIRCUIT
EXT SC IN
38
EE SC IN
34
IC406
TP32
IC407
+5V
VR20
EE S CH
(1)
(2)
(AU-520/S ONLY)
C CP (CLAMP PULSE)
+9V
D200.IC215.Q200
REF. VOLT GEN.
IC204
IC205
1A
1B
2A
2B
3A
3B
4A
4B
4, 7, 9, 12
H.BLANK
+5V
IC21
WST
RST
PR EXP (FIFO
4~11
D IN
RCK
IC20
PB EXP (FIFO
IC221
C221.IC215
TRAPEZOID GEN.
VR8
C PL
IC110.
WRITE S
WRITE C
WRITE S
WRITE C
PULSE GE
IC200.201
RST PULSE(PR)
RST PULSE(PB)
GEN.
P3
VD 2H DL
6
C READ CLOCK
P4
CRCK
1
2F RSTC
4
FH IN
6
BURST FLAG GEN.
+B
VR22
B SHIFT
VR21
B WIDE
IC402
MMV
IC402
MMV
IC404
IC404
Q311

INPUT STATES			OUTPUT PIN
INHIBIT	B	A	
0	0	0	12
0	0	1	14
0	1	0	15
0	1	1	11
1	X	X	NONE



0.4Vp-p
H
0.4Vp-p
H
1.5Vp-p
H
0.8Vp-p
H
H
IC210
WST
RST
OUT
PR EXPAND (FIFO)
IN
RCK
WCK
WE
17～24
4～11
IC209
PB EXPAND (FIFO)
C DOP
IC211
D/A
11～18
IC212
FL200
2.6MHz L.P.F
FL201
TP13
TP14
Q301.302
DEF. AMP
Q303.304
GAIN AMP
R-Y GAIN
VR11
B PHASE
IC305
DEF. AMP
VR15
+B
L.P.F
BUFFER
Q310
Q312.313
Q314.315
Q316
Q305
BUFFER
PR SIGNAL
TP16
+5V
VR12
IC301
BAL. MOD.
R-Y BLK BAL
VR13
R-Y BAL
Q309 C320
S/H
IC305.Q308
DC AMP
PB SIGNAL
TP18
B-Y BLK BAL
VR17
IC303
VR18
B-Y BAL
Q306.C314.L305
AMP & BPF
Q307
TP17
PR SUB CARRIER
4.43MHz.0.6Vp-p
TP23
TP22
PB SUB CARRIER
VR16
B-Y GAIN
IC306 Q319
DC AMP
Q320.C342
IC306
VR23
B LEVEL
IC302
C343.R373
Q321
IC221
C221.IC215
TRAPEZOID GEN.
IC216
IC217
AMP
LPF & AMP
TP11
VL200.C232 C237.238.Q201
13.5MHz VCO
IC218
TP12
IC220
VR8
C PLL POS
IC32
TP10
IC206
PLD
HBK
WBST
CCP
WE
TRZ
CLK1
CLK2
IC110.207.208
WRITE START(PR)
WRITE CLOCK(PR)
WRITE START(PB)
WRITE CLOCK(PB)
PULSE GEN.
TP21
QUAD
VR19
Q317,318
PHASE SHIFTER
VR24
CAR.
FL400
4.43MHz B.P.F
X1.C428 IC407.VC401
4.43MHz OSC
(2)
(1)
(AU-520/S ONLY)
VR25
VOW LEVEL
IC408
IC302
Q404,406
BUFFER
Q400−402
DEF-AMP
Q403
VR14
VIDEO OUT LEVEL
IC401,Q412
DC AMP
Q413
TP20
TP19
Q408,410
30
VOW (VIDEO OUTPUT WHITE-CHARACTER)
31
VOB (VIDEO OUTPUT BLACK-CHARACTER)
40
TBC OFF Ⓛ (FOR AU-520/S)
SUP ON Ⓛ (FOR AU-505)
44
VIDEO 2 OUT
46
VIDEO 3 OUT
42
VIDEO 1 OUT

VIDEO 4 BLOCK DIAGRAM

NOTE:
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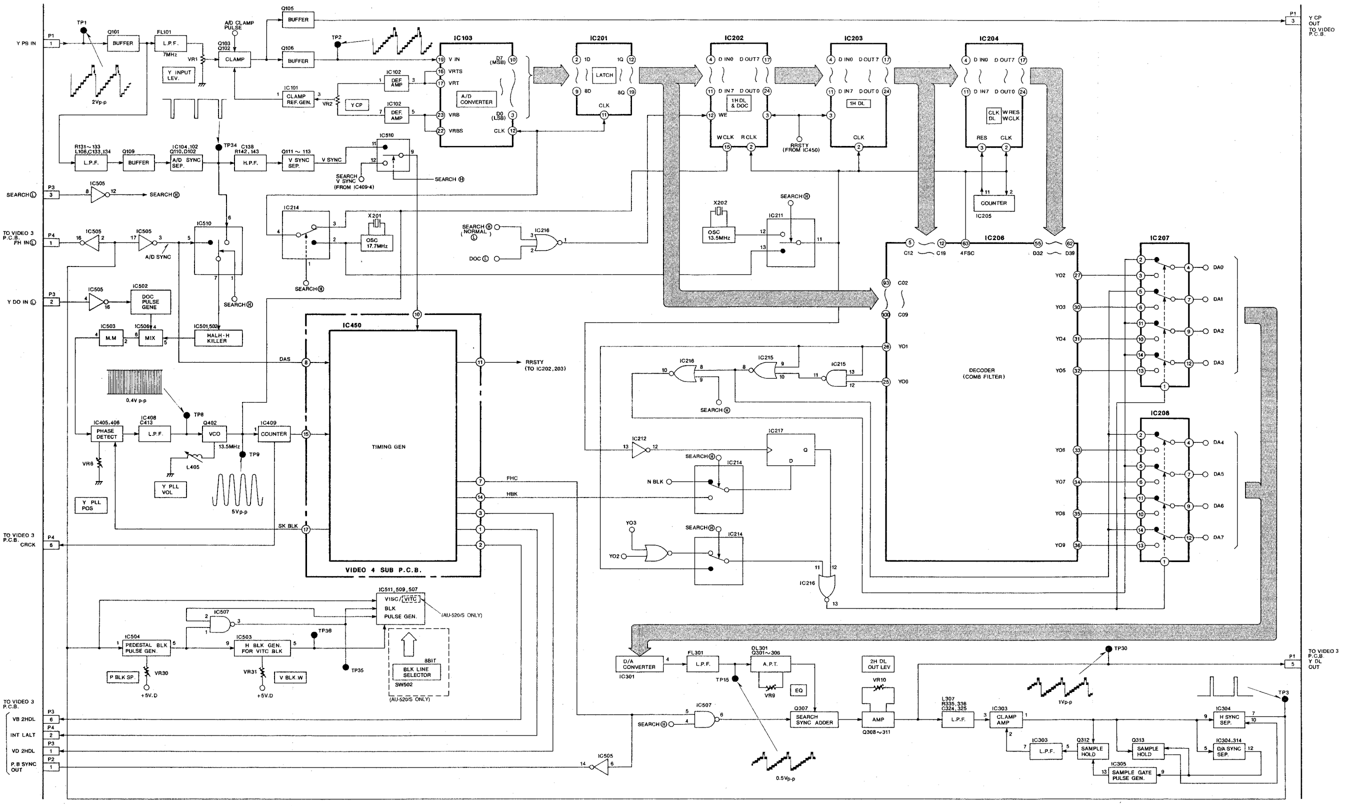
HEAD AMP


Y PB IN
P1
TP1
2Vp-p
Q101
BUFFER
FL101
L.P.F.
7MHz
VR1
Y INPUT LEV.
A/D CLAMP PULSE
Q103 Q102
CLAMP
Q105
BUFFER
Q106
BUFFER
TP2
IC101
CLAMP REF.GEN.
VR2
Y CP
IC102
DEF AMP
IC103
V IN
VRTS
VRT
VRB
VRBS
A/D CONVERTER
D7 (MSB)
D0 (LSB)
CLK
IC201
1D
1Q
8D
8Q
LATCH
CLK
IC202
D IN0
D OUT7
D IN7
D OUT0
1H DL & DOC
WE
WCLK
RCLK
RRSTY (FROM IC450)
IC203
1H DL
CLK
IC204
CLK DL
WRES WCLK
RES
CLK
IC205
COUNTER
Y CP OUT TO VIDEO P.C.B.
R131~133 L108,C133,134
L.P.F.
Q109
BUFFER
IC104,102 Q110,D102
A/D SYNC SEP.
TP34
C138 R142,143
H.P.F.
Q111~113
V SYNC SEP.
V SYNC
IC510
SEARCH V SYNC (FROM IC409-4)
SEARCH Ⓗ
SEARCH Ⓛ
P3
IC505
TO VIDEO 3 P.C.B. FH IN Ⓛ
P4
A/D SYNC
IC214
X201
OSC 17.7MHz
SEARCH Ⓗ
SEARCH Ⓗ NORMAL Ⓛ
DOC Ⓛ
IC216
X202
OSC 13.5MHz
IC211
IC206
C12
C19
4FSC
D32
D39
C02
C09
Y DO IN Ⓛ
IC502
DOC PULSE GENE
IC503
M.M
IC506
MIX
IC501,502
HALH-H KILLER
DAS
IC450
TIMING GEN
RRSTY (TO IC202,203)
0.4V p-p
TP8
IC405,406
PHASE DETECT
IC408 C413
L.P.F.
Q402
VCO
13.5MHz
L405
TP9
5Vp-p
IC409
COUNTER
VR8
Y PLL VOL
Y PLL POS
FHC
HBK
SK BLK
TO VIDEO 3 P.C.B. CRCK
VIDEO 4 SUB P.C.B.
YO2
YO3
YO4
YO5
YO1
YO0
YO6
YO7
YO8
YO9
DECODER (COMB FILTER)
IC207
DA0
DA1
DA2
DA3
IC208
DA4
DA5
DA6
DA7
IC215
IC212
IC217
N BLK
IC216
IC511,509,507
VISC/VITC
BLK PULSE GEN.
(AU-520/S ONLY)
IC507
IC504
PEDESTAL BLK PULSE GEN.
IC503
H BLK GEN. FOR VITC BLK
TP36
TP35
VR30
P BLK SP
+5V.D
VR31
V BLK W
8BIT
BLK LINE SELECTOR
SW502
(AU-520/S ONLY)
TO VIDEO 3 P.C.B.
VB 2HDL
INT LALT
VD 2HDL
P.B SYNC OUT
P2
D/A CONVERTER
IC301
FL301
L.P.F.
QL301 Q301~306
A.P.T.
TP15
VR9
EQ
Q307
SEARCH SYNC ADDER
2H DL OUT LEV
VR10
AMP
Q308~311
0.5Vp-p
TP30
1Vp-p
L307 R335,336 C324,325
L.P.F.
IC303
CLAMP AMP
IC303
L.P.F.
Q312
SAMPLE HOLD
Q313
SAMPLE HOLD
IC305
SAMPLE GATE PULSE GEN.
IC304
H SYNC SEP.
IC304,314
Q/A SYNC SEP.
TP3
TO VIDEO 3 P.C.B. Y DL OUT
P1
5

Y.P HEAD (CH1)

Y.P HEAD (CH2)

C.P HEAD (CH1)

C.P HEAD (CH2)

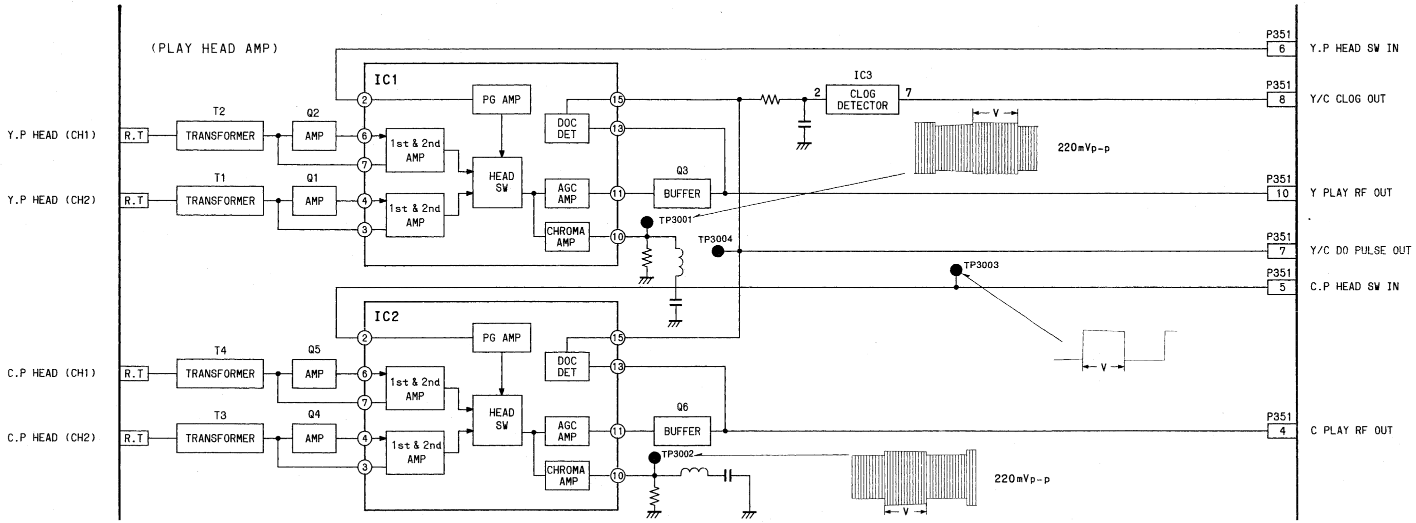
REVERSE SIDE

VIDEO 3
BLOCK DIAGRAM

HEAD AMP BLOCK DIAGRAM (FOR AU-520/S ONLY)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

Y CP
OUT
TO VIDEO
P.C.B.


(PLAY HEAD AMP)
Y.P HEAD (CH1)
Y.P HEAD (CH2)
C.P HEAD (CH1)
C.P HEAD (CH2)
R.T
T2
T1
T4
T3
TRANSFORMER
Q2
Q1
Q5
Q4
AMP
IC1
IC2
1st & 2nd AMP
PG AMP
HEAD SW
DOC DET
AGC AMP
CHROMA AMP
2
3
4
6
7
10
11
13
15
Q3
Q6
BUFFER
IC3
CLOG DETECTOR
2
7
TP3001
TP3002
TP3003
TP3004
V
220mVp-p
P351
6
8
10
7
5
4
Y.P HEAD SW IN
Y/C CLOG OUT
Y PLAY RF OUT
Y/C DO PULSE OUT
C.P HEAD SW IN
C PLAY RF OUT

TO VIDEO 3
P.C.B.
Y DL
OUT

LINEAR AUDIO BLOCK DIAGRAM (FOR AU-520/S)

NOTE:
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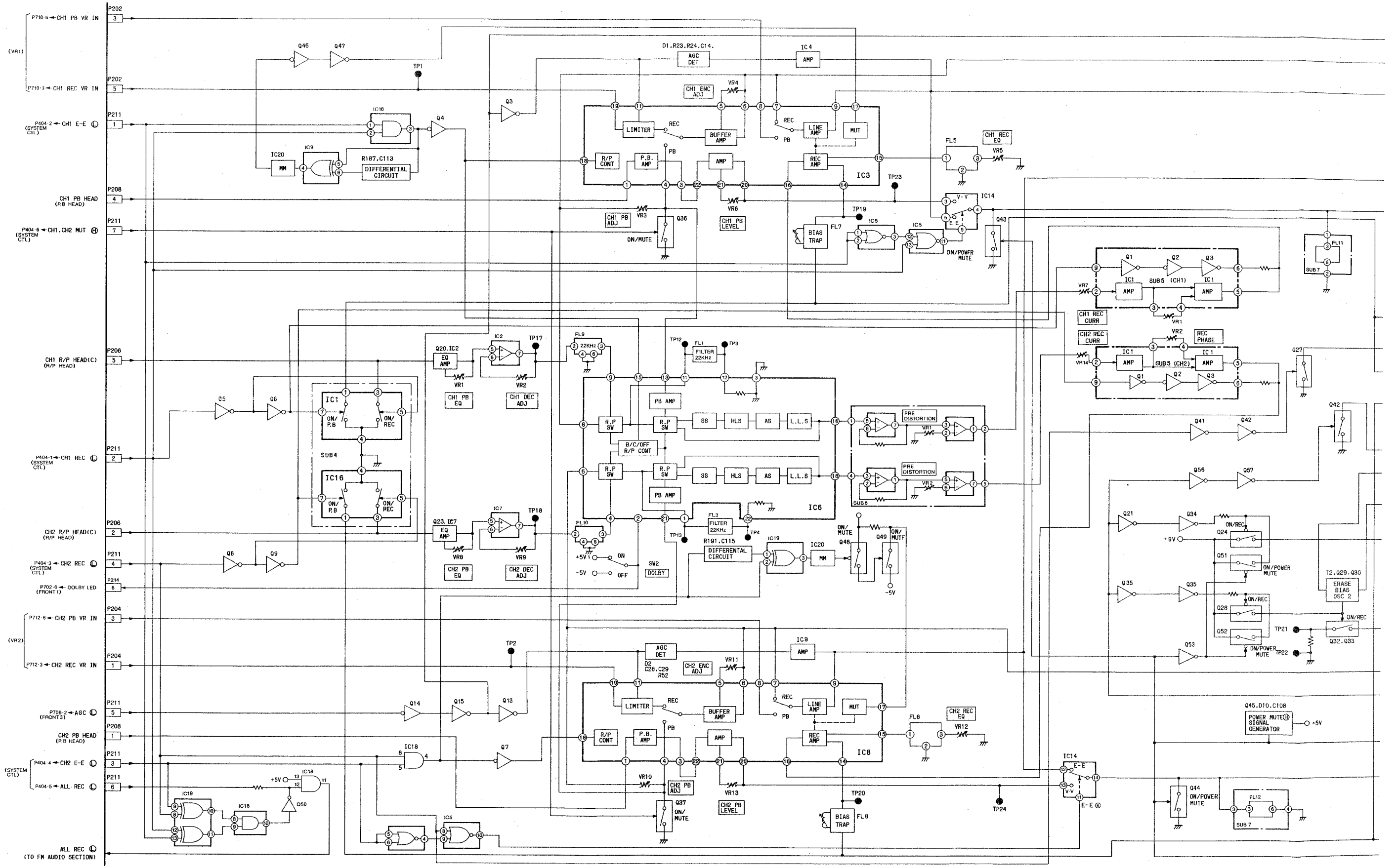
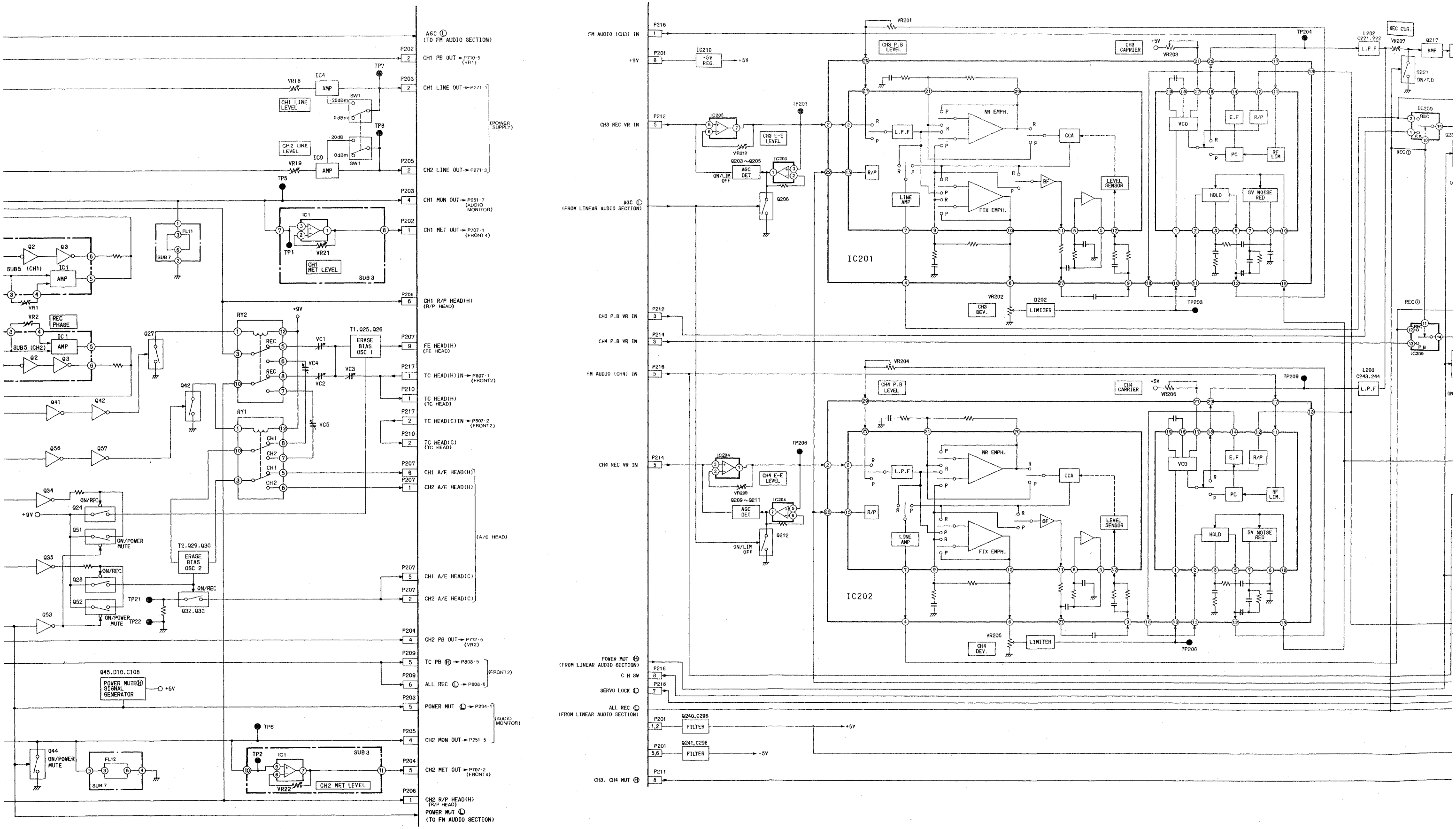

P202
P710-6 ◄ CH1 PB VR IN
(VR1)
P710-3 ◄ CH1 REC VR IN
P211
P404-2 ◄ CH1 E-E Ⓛ (SYSTEM CTL)
P208
CH1 PB HEAD (P.B HEAD)
P404-6 ◄ CH1.CH2 MUT Ⓗ (SYSTEM CTL)
P206
CH1 R/P HEAD(C) (R/P HEAD)
P404-1 ◄ CH1 REC Ⓛ (SYSTEM CTL)
CH2 R/P HEAD(C) (R/P HEAD)
P404-3 ◄ CH2 REC Ⓛ (SYSTEM CTL)
P214
P702-6 ◄ DOLBY LED (FRONT1)
P204
P712-6 ◄ CH2 PB VR IN
(VR2)
P712-3 ◄ CH2 REC VR IN
P706-2 ◄ AGC Ⓛ (FRONT3)
CH2 PB HEAD (P.B HEAD)
P404-4 ◄ CH2 E-E Ⓛ
P404-5 ◄ ALL REC Ⓛ
ALL REC Ⓛ (TO FM AUDIO SECTION)
Q46
Q47
TP1
D1.R23.R24.C14.
AGC DET
IC4
AMP
CH1 ENC ADJ
VR4
Q3
IC18
Q4
IC20
IC9
MM
R187.C113
DIFFERENTIAL CIRCUIT
LIMITER
REC
BUFFER AMP
LINE AMP
MUT
R/P CONT
P.B. AMP
PB
AMP
REC AMP
IC3
TP23
FL5
CH1 REC EQ
VR5
CH1 PB ADJ
VR3
Q36
ON/MUTE
VR6
CH1 PB LEVEL
TP19
BIAS TRAP
FL7
IC5
IC14
V-V
E-E
Q43
ON/POWER MUTE
Q1
Q2
Q3
VR7
IC1
AMP
SUB5 (CH1)
VR1
CH1 REC CURR
CH2 REC CURR
VR2
REC PHASE
VR14
SUB5 (CH2)
FL11
SUB7
Q27
Q20.IC2
EQ AMP
TP17
CH1 PB EQ
CH1 DEC ADJ
FL9
22KHz
TP12
FL1
FILTER 22KHz
TP3
Q5
Q6
IC1
ON/ P.B
ON/ REC
SUB4
IC16
PB AMP
R.P SW
SS
HLS
AS
L.L.S
B/C/OFF R/P CONT
IC6
PRE DISTORTION
SUB6
Q41
Q42
Q56
Q57
Q23.IC7
TP18
CH2 PB EQ
VR8
VR9
CH2 DEC ADJ
FL10
+5V
-5V
ON
OFF
SW2
DOLBY
FL3
TP13
TP4
R191.C115
DIFFERENTIAL CIRCUIT
IC19
ON/ MUTE
Q48
Q49
ON/ MUTE
Q8
Q9
Q21
Q34
ON/REC
Q24
+9V
Q51
ON/POWER MUTE
T2.Q29.Q30
ERASE BIAS OSC 2
Q35
Q28
Q52
TP21
TP22
Q32.Q33
Q53
TP2
AGC DET
D2 C28.C29 R52
CH2 ENC ADJ
VR11
IC9
IC8
FL6
CH2 REC EQ
VR12
Q14
Q15
Q13
Q7
Q45.D10.C108
POWER MUTE Ⓗ SIGNAL GENERATOR
+5V
VR10
CH2 PB ADJ
Q37
VR13
CH2 PB LEVEL
TP20
FL8
TP24
Q44
FL12
Q50

FM AUDIO BLOCK DIAGRAM (FOR AU-520/S)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


AGC Ⓛ (TO FM AUDIO SECTION)
P202 2 CH1 PB OUT → P710-5 (VR1)
TP7
VR18
IC4
AMP
CH1 LINE LEVEL
SW1
-20dBm
0dBm
P203 2 CH1 LINE OUT → P271-1
(POWER SUPPLY)
TP8
CH2 LINE LEVEL
-20dB
0dBm
IC9
VR19
AMP
SW1
P205 2 CH2 LINE OUT → P271-3
TP5
P203 4 CH1 MON OUT → P251-7 (AUDIO MONITOR)
FL11
SUB 7
IC1
TP1
VR21
CH1 MET LEVEL
SUB 3
P202 1 CH1 MET OUT → P707-1 (FRONT 4)
Q2
Q3
SUB5 (CH1)
IC1
AMP
VR1
VR2
REC PHASE
SUB5 (CH2)
RY2
+9V
Q27
REC
T1.Q25.Q26
ERASE BIAS OSC 1
VC1
VC4
VC2
VC3
VC5
P206 6 CH1 R/P HEAD(H) (R/P HEAD)
P207 9 FE HEAD(H) (FE HEAD)
P217 1 TC HEAD(H)IN → P807-1 (FRONT2)
P210 1 TC HEAD(H) (TC HEAD)
P217 2 TC HEAD(C)IN → P807-2 (FRONT2)
P210 2 TC HEAD(C) (TC HEAD)
Q41
Q42
RY1
CH1
CH2
Q56
Q57
P207 6 CH1 A/E HEAD(H)
P207 1 CH2 A/E HEAD(H)
(A/E HEAD)
Q34
ON/REC
+9V
Q24
Q51
ON/POWER MUTE
Q35
T2.Q29.Q30
ERASE BIAS OSC 2
Q28
ON/REC
TP21
Q52
Q32.Q33
Q53
ON/POWER MUTE
TP22
P207 5 CH1 A/E HEAD(C)
P207 2 CH2 A/E HEAD(C)
P204 4 CH2 PB OUT → P712-5 (VR2)
P209 5 TC PB Ⓗ → P808-5
P209 6 ALL REC Ⓛ → P808-6
(FRONT 2)
Q45.D10.C108
POWER MUTE Ⓗ SIGNAL GENERATOR
+5V
P203 5 POWER MUT Ⓛ → P234-1
(AUDIO MONITOR)
TP6
P205 4 CH2 MON OUT → P251-5
Q44
ON/POWER MUTE
FL12
SUB 7
TP2
IC1
SUB 3
VR22
CH2 MET LEVEL
P204 5 CH2 MET OUT → P707-2 (FRONT4)
P206 1 CH2 R/P HEAD(H) (R/P HEAD)
POWER MUT Ⓛ (TO FM AUDIO SECTION)
FM AUDIO (CH3) IN P216 1
+9V P201 8
IC210
+5V REG
+5V
VR201
CH3 P.B LEVEL
CH3 CARRIER
VR203
TP204
TP201
CH3 REC VR IN P212 5
IC203
VR210
CH3 E-E LEVEL
Q203~Q205
AGC DET
ON/LIM OFF
AGC Ⓛ (FROM LINEAR AUDIO SECTION)
Q206
L.P.F
NR EMPH.
CCA
R/P
LINE AMP
FIX EMPH.
BF
LEVEL SENSOR
VCO
E.F
R/P
PC
RF LIM
HOLD
SV NOISE RED
IC201
VR202
CH3 DEV.
D202
LIMITER
TP203
CH3 P.B VR IN P212 3
CH4 P.B VR IN P214 3
FM AUDIO (CH4) IN P216 5
VR204
CH4 P.B LEVEL
CH4 CARRIER
VR206
TP209
TP206
CH4 REC VR IN P214 5
IC204
VR209
CH4 E-E LEVEL
Q209~Q211
AGC DET
Q212
ON/LIM OFF
IC202
VR205
CH4 DEV.
LIMITER
TP208
POWER MUT Ⓗ (FROM LINEAR AUDIO SECTION)
C H SW P216 8
SERVO LOCK Ⓛ P216 7
ALL REC Ⓛ (FROM LINEAR AUDIO SECTION)
P201 1,2
Q240,C296
FILTER
+5V
P201 5,6
Q241,C298
FILTER
-5V
CH3, CH4 MUT Ⓗ P211 8
L202 C221,222
L.P.F
REC CUR.
VR207
Q217
AMP
Q221 ON/P.B
IC209
REC
P.B
REC Ⓛ
REC Ⓛ
L203 C243,244
L.P.F

FM AUDIO BLOCK DIAGRAM (FOR AU-520/S)

NOTE:
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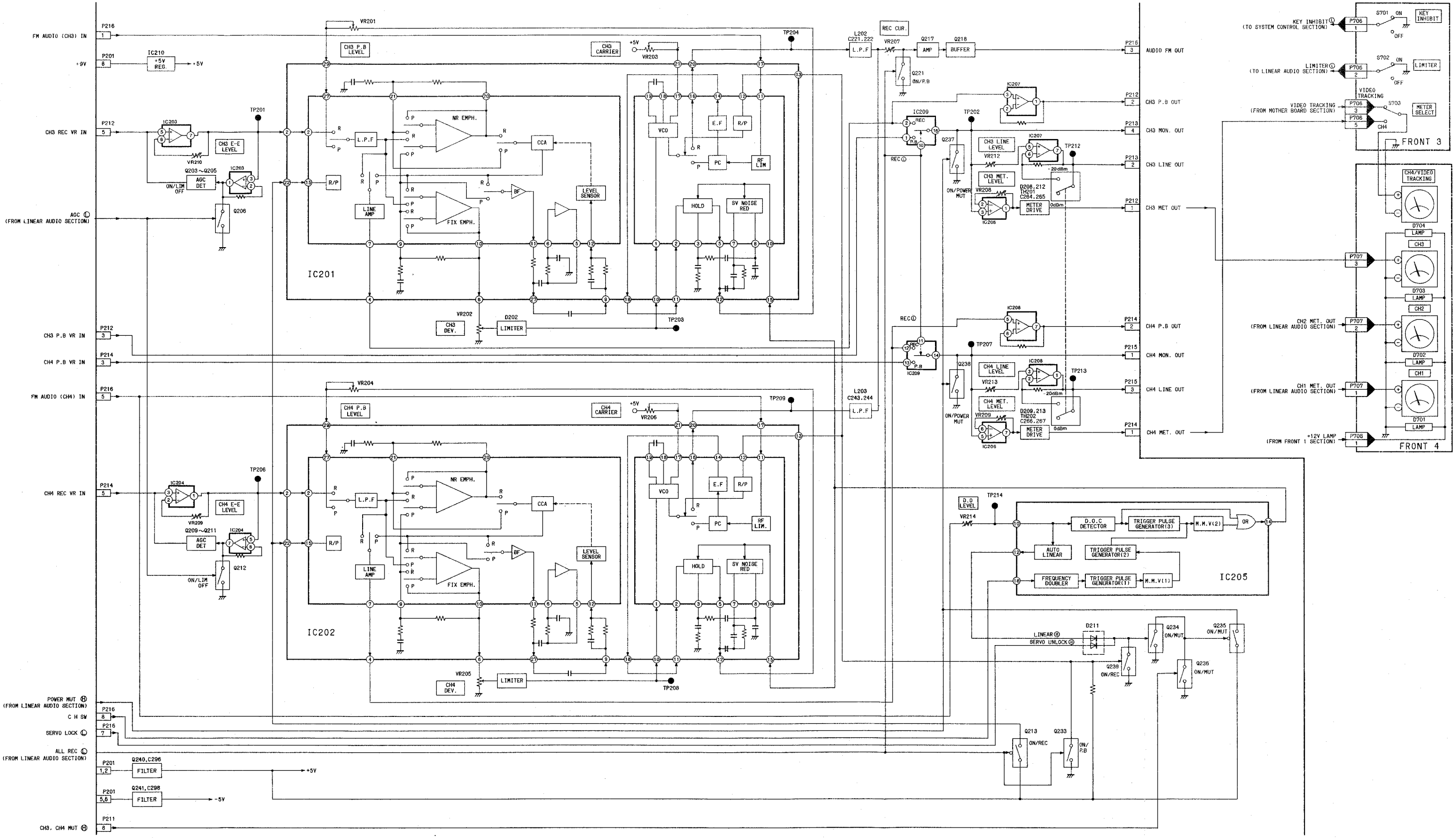
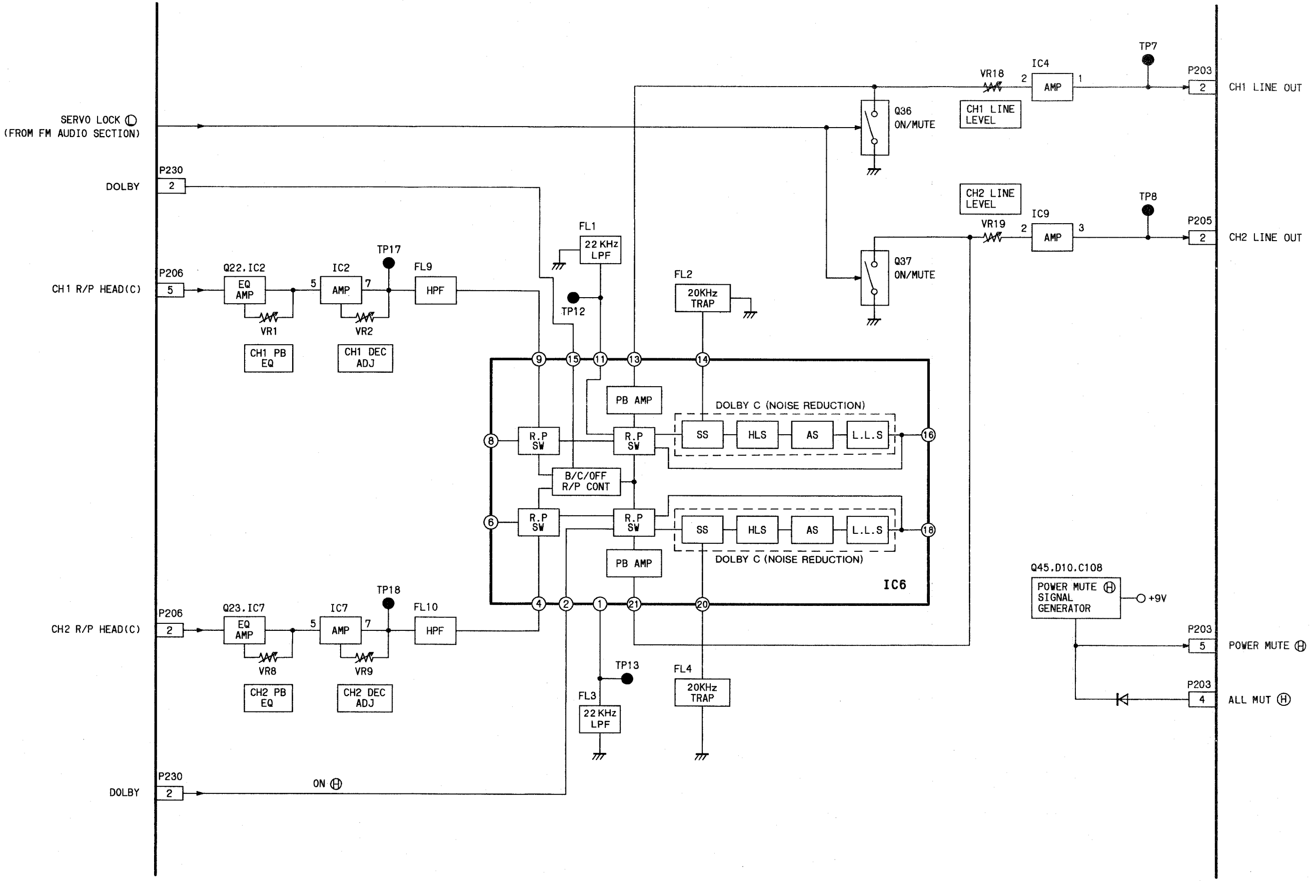
AU-505 = USED FOR AU-505 ONLY

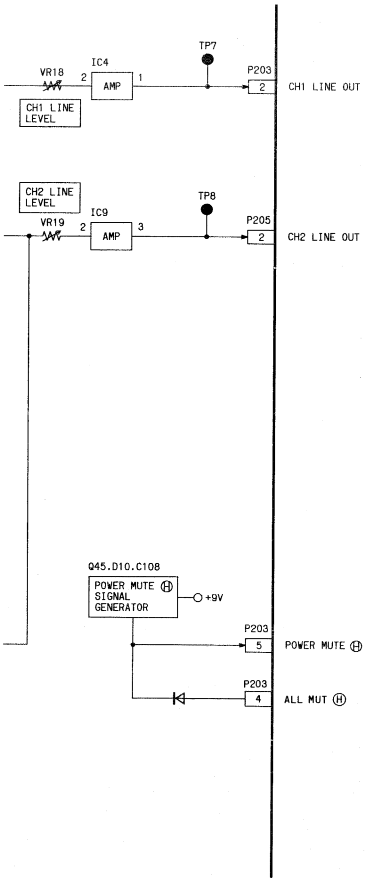

FM AUDIO (CH3) IN
P216
+9V
P201
IC210
+5V REG.
+5V
CH3 REC VR IN
P212
IC203
CH3 E-E LEVEL
VR210
Q203~Q205
AGC DET
ON/LIM OFF
AGC
(FROM LINEAR AUDIO SECTION)
Q206
TP201
VR201
CH3 P.B LEVEL
CH3 CARRIER
VR203
TP204
L.P.F
R/P
NR EMPH.
CCA
LINE AMP
FIX EMPH.
BF
LEVEL SENSOR
VCO
E.F
R/P
PC
RF LIM
HOLD
SV NOISE RED
IC201
VR202
CH3 DEV.
D202
LIMITER
TP203
CH3 P.B VR IN
CH4 P.B VR IN
P214
FM AUDIO (CH4) IN
VR204
CH4 P.B LEVEL
CH4 CARRIER
VR206
TP209
CH4 REC VR IN
IC204
CH4 E-E LEVEL
VR209
Q209~Q211
Q212
TP206
IC202
VR205
CH4 DEV.
TP208
POWER MUT
(FROM LINEAR AUDIO SECTION)
C H SW
SERVO LOCK
ALL REC
(FROM LINEAR AUDIO SECTION)
Q240,C296
FILTER
+5V
Q241,C298
-5V
P211
CH3, CH4 MUT
L202
C221,222
REC CUR.
VR207
Q217
AMP
Q218
BUFFER
Q221
ON/P.B
AUDIO FM OUT
IC207
CH3 P.B OUT
IC209
REC
P.B
TP202
Q237
ON/POWER MUT
CH3 LINE LEVEL
VR212
TP212
CH3 MON. OUT
CH3 LINE OUT
CH3 MET. LEVEL
VR208
D208,212
TH201
C264,265
METER DRIVE
IC206
-20dBm
0dBm
CH3 MET OUT
L203
C243,244
IC208
TP207
Q238
CH4 LINE LEVEL
VR213
TP213
CH4 MET. LEVEL
D209,213
TH202
C266,267
CH4 P.B OUT
P215
CH4 MON. OUT
CH4 LINE OUT
CH4 MET. OUT
D.O LEVEL
VR214
TP214
D.O.C DETECTOR
TRIGGER PULSE GENERATOR(3)
M.M.V(2)
OR
AUTO LINEAR
TRIGGER PULSE GENERATOR(2)
FREQUENCY DOUBLER
TRIGGER PULSE GENERATOR(1)
M.M.V(1)
IC205
LINEAR
SERVO UNLOCK
D211
Q239
ON/REC
Q234
ON/MUT
Q235
Q236
Q213
ON/REC
Q233
ON/P.B
KEY INHIBIT
(TO SYSTEM CONTROL SECTION)
P706
S701
ON
OFF
LIMITER
(TO LINEAR AUDIO SECTION)
S702
VIDEO TRACKING
(FROM MOTHER BOARD SECTION)
S703
METER SELECT
CH4
FRONT 3
CH4/VIDEO TRACKING
D704
LAMP
CH3
P707
D703
CH2
CH2 MET. OUT
(FROM LINEAR AUDIO SECTION)
D702
CH1
CH1 MET. OUT
(FROM LINEAR AUDIO SECTION)
D701
+12V LAMP
(FROM FRONT 1 SECTION)
P708
FRONT 4

REVERSE SIDE

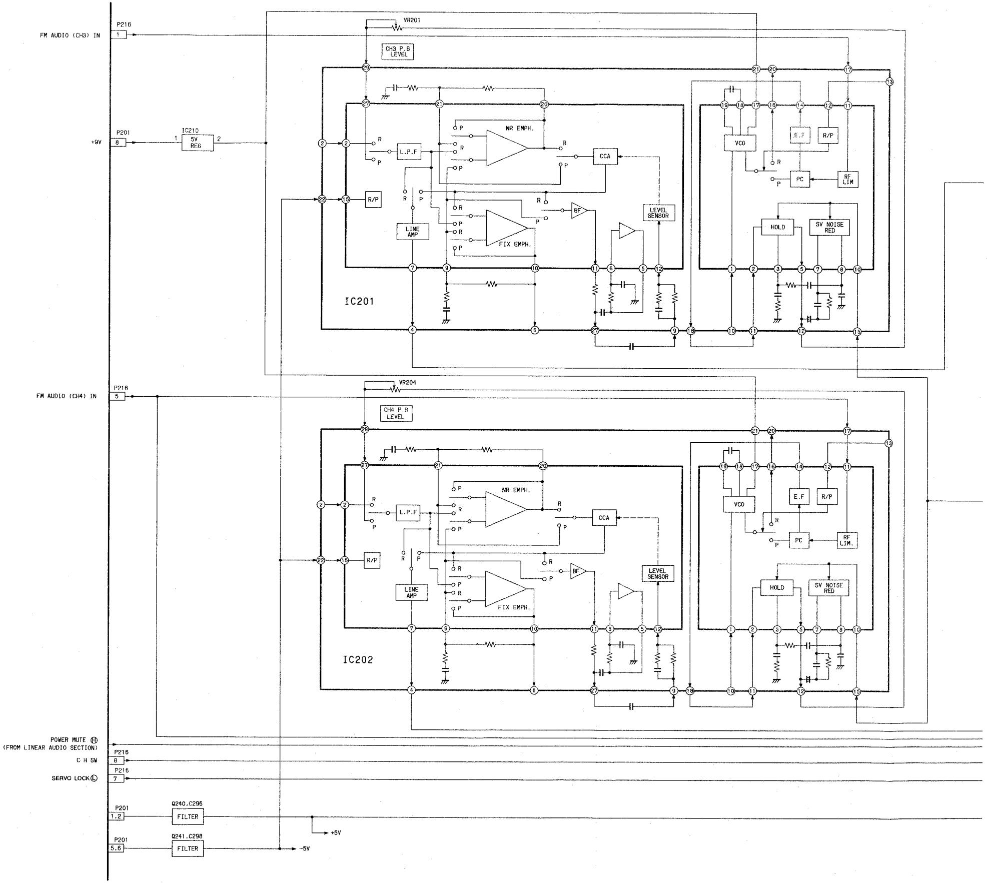
LINEAR AUDIO, FM AUDIO BLOCK DIAGRAM

LINEAR AUDIO BLOCK DIAGRAM (FOR AU-505)

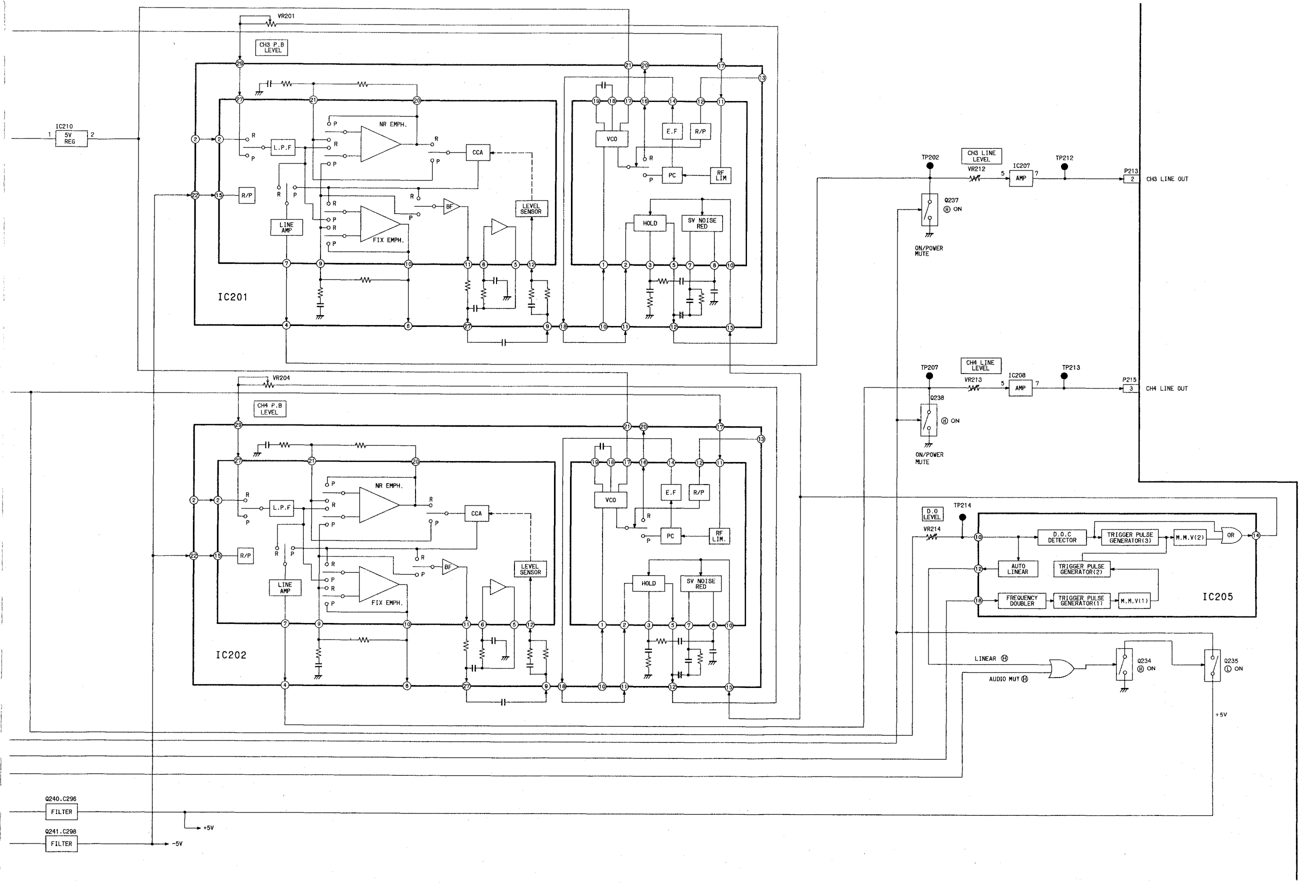

SERVO LOCK Ⓛ
(FROM FM AUDIO SECTION)
DOLBY
P230
2
CH1 R/P HEAD(C)
P206
5
Q22.IC2
EQ AMP
VR1
CH1 PB EQ
IC2
5
AMP
7
VR2
CH1 DEC ADJ
TP17
FL9
HPF
FL1
22 KHz LPF
TP12
FL2
20KHz TRAP
9
15
11
13
14
PB AMP
DOLBY C (NOISE REDUCTION)
8
R.P SW
R.P SW
SS
HLS
AS
L.L.S
16
B/C/OFF R/P CONT
6
R.P SW
R.P SW
SS
HLS
AS
L.L.S
18
PB AMP
DOLBY C (NOISE REDUCTION)
IC6
4
2
1
21
20
CH2 R/P HEAD(C)
P206
2
Q23.IC7
EQ AMP
VR8
CH2 PB EQ
IC7
5
AMP
7
VR9
CH2 DEC ADJ
TP18
FL10
HPF
TP13
FL3
22 KHz LPF
FL4
20KHz TRAP
DOLBY
P230
2
ON Ⓗ
Q36
ON/MUTE
Q37
ON/MUTE
VR18
2
IC4
AMP
1
CH1 LINE LEVEL
TP7
P203
2
CH1 LINE OUT
CH2 LINE LEVEL
VR19
2
IC9
AMP
3
TP8
P205
2
CH2 LINE OUT
Q45.D10.C108
POWER MUTE Ⓗ SIGNAL GENERATOR
+9V
P203
5
POWER MUTE Ⓗ
P203
4
ALL MUT Ⓗ


VR18
IC4
AMP
2
1
TP7
P203
2
CH1 LINE OUT
CH1 LINE LEVEL
CH2 LINE LEVEL
VR19
IC9
AMP
2
3
TP8
P205
2
CH2 LINE OUT
Q45.D10.C108
POWER MUTE Ⓗ SIGNAL GENERATOR
+9V
P203
5
POWER MUTE Ⓗ
P203
4
ALL MUT Ⓗ

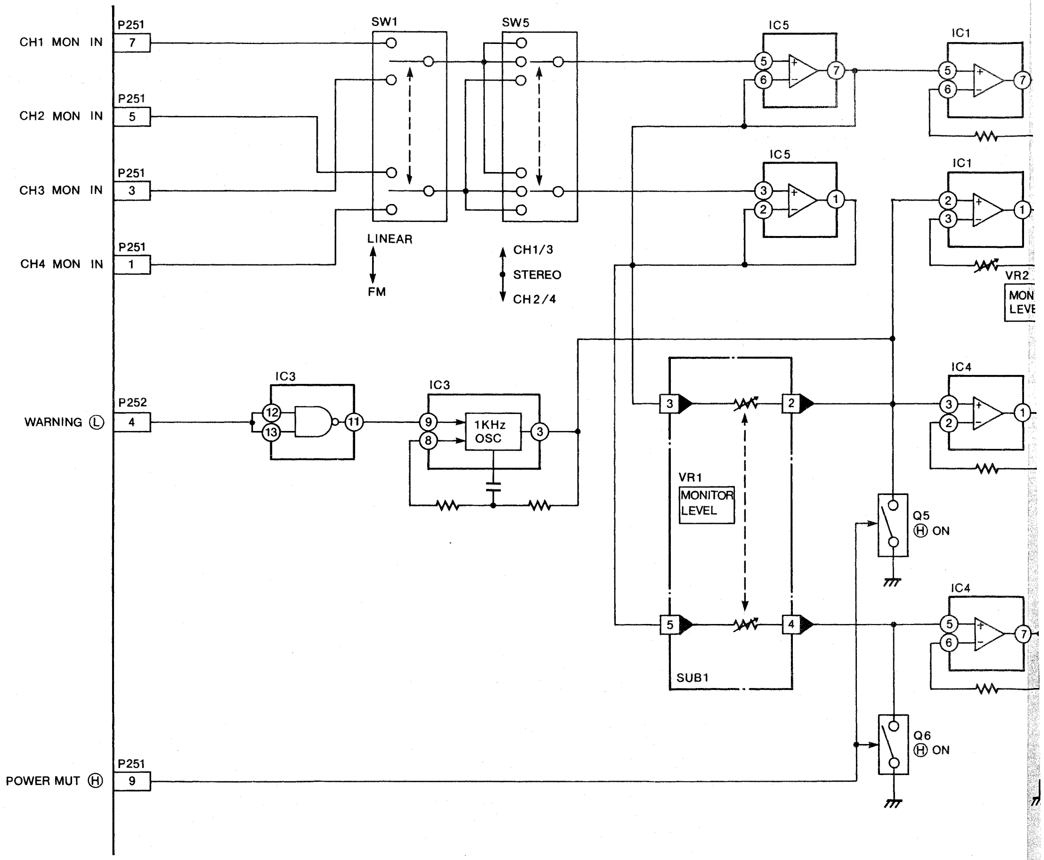
FM AUDIO BLOCK DIAGRAM (FOR AU-505)


FM AUDIO (CH3) IN
P216
1
VR201
CH3 P.B LEVEL
+9V
P201
8
IC210
5V REG
1
2
L.P.F
NR EMPH.
CCA
R/P
LINE AMP
FIX EMPH.
BF
LEVEL SENSOR
VCO
E.F
R/P
PC
RF LIM
HOLD
SV NOISE RED
IC201
FM AUDIO (CH4) IN
P216
5
VR204
CH4 P.B LEVEL
L.P.F
NR EMPH.
CCA
R/P
LINE AMP
FIX EMPH.
BF
LEVEL SENSOR
VCO
E.F
R/P
PC
RF LIM.
HOLD
SV NOISE RED
IC202
POWER MUTE Ⓗ (FROM LINEAR AUDIO SECTION)
C H SW
P216
8
SERVO LOCK Ⓛ
P216
7
P201
1.2
Q240.C296
FILTER
+5V
P201
5.6
Q241.C298
FILTER
-5V

LOCK DIAGRAM (FOR AU-505)

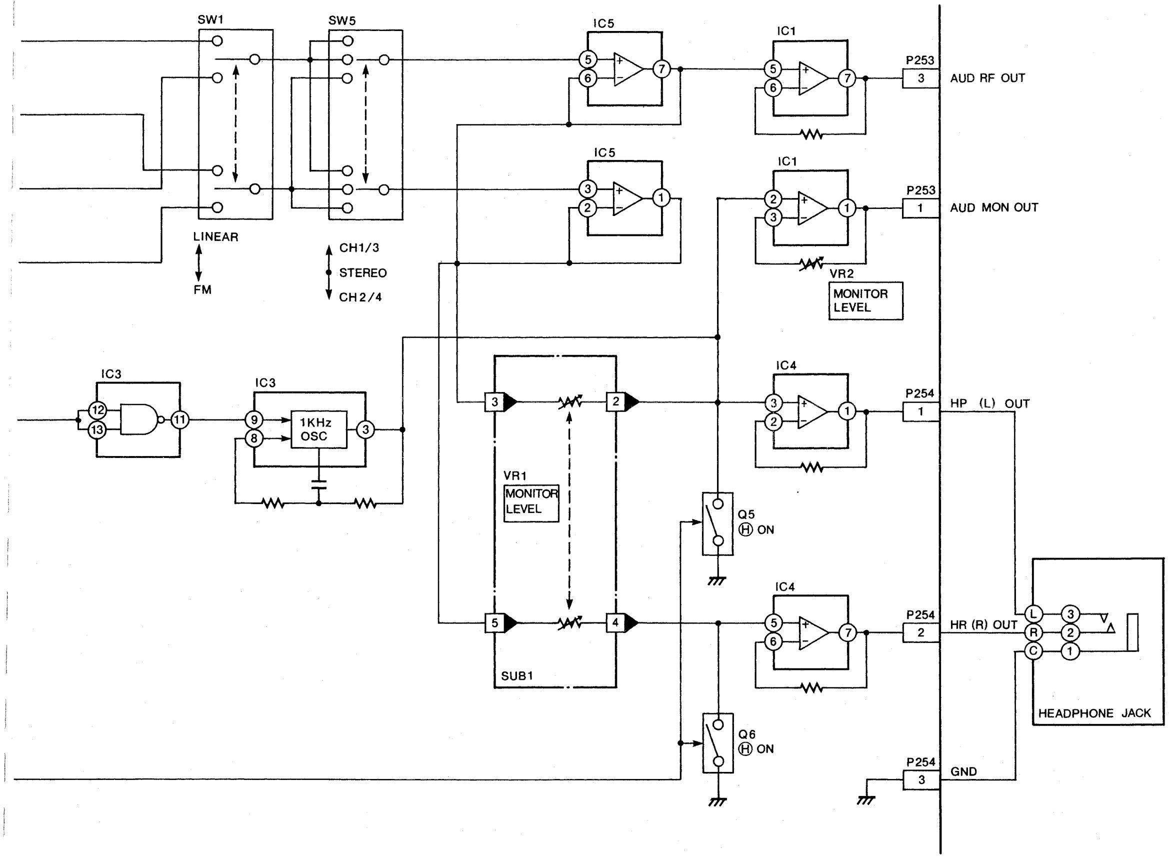

VR201
CH3 P.B LEVEL
IC210
5V REG
NR EMPH.
L.P.F
CCA
R/P
LINE AMP
FIX EMPH.
BF
LEVEL SENSOR
VCO
E.F
PC
RF LIM
HOLD
SV NOISE RED
IC201
VR204
CH4 P.B LEVEL
IC202
TP202
CH3 LINE LEVEL
VR212
IC207
AMP
TP212
P213
CH3 LINE OUT
Q237
Ⓗ ON
ON/POWER MUTE
TP207
CH4 LINE LEVEL
VR213
IC208
TP213
P215
CH4 LINE OUT
Q238
D.O LEVEL
TP214
VR214
D.O.C DETECTOR
TRIGGER PULSE GENERATOR(3)
M.M.V(2)
OR
AUTO LINEAR
TRIGGER PULSE GENERATOR(2)
FREQUENCY DOUBLER
TRIGGER PULSE GENERATOR(1)
M.M.V(1)
IC205
LINEAR Ⓗ
AUDIO MUT Ⓗ
Q234
Q235
Ⓛ ON
+5V
Q240.C296
FILTER
Q241.C298
-5V

AUDIO MONITOR BLOCK DIAGRAM (FOR AU-520/S ONLY)


CH1 MON IN
P251
7
CH2 MON IN
P251
5
CH3 MON IN
P251
3
CH4 MON IN
P251
1
WARNING Ⓛ
P252
4
POWER MUT Ⓗ
P251
9
SW1
LINEAR
FM
SW5
CH1/3
STEREO
CH2/4
IC3
⑫
⑬
⑪
IC3
⑨
⑧
1KHz
OSC
③
IC5
⑤
⑥
⑦
IC5
③
②
①
IC1
⑤
⑥
⑦
IC1
②
③
①
VR2
MON
LEVE
VR1
MONITOR
LEVEL
3
2
5
4
SUB1
IC4
③
②
①
IC4
⑤
⑥
⑦
Q5
Ⓗ ON
Q6
Ⓗ ON

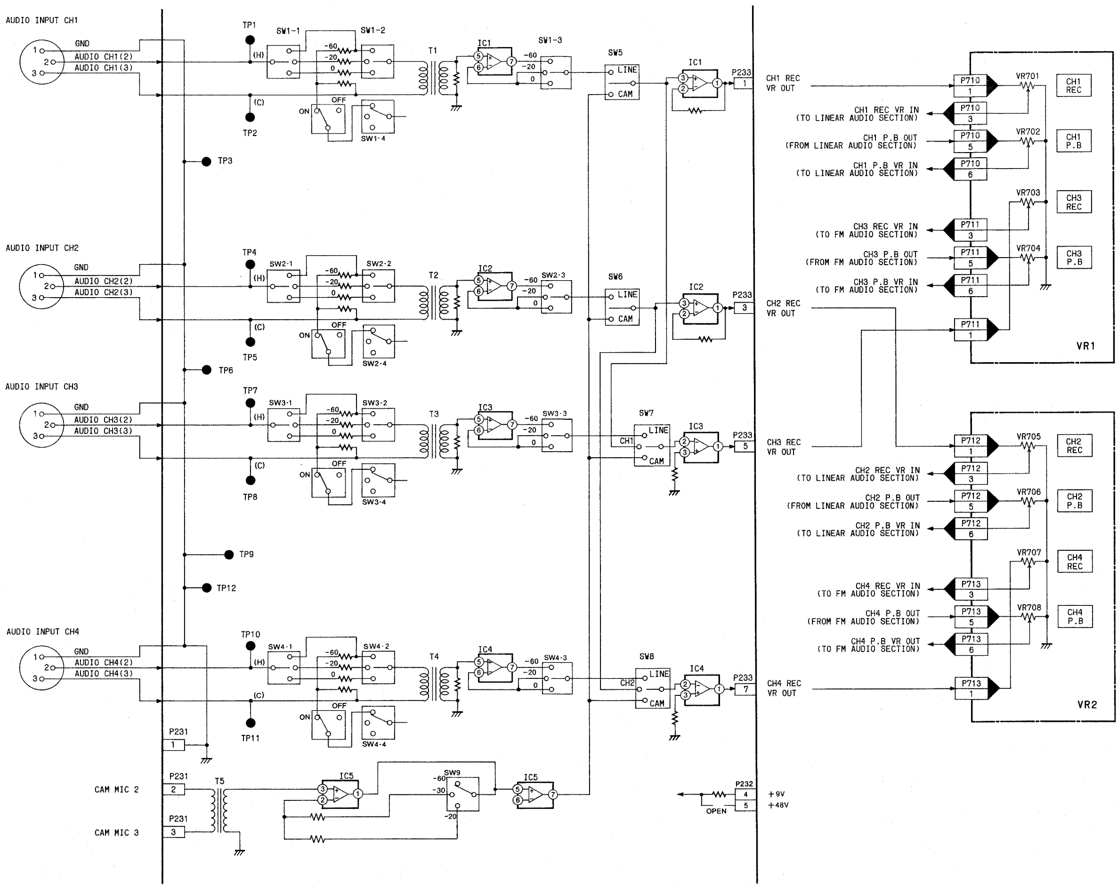
BLOCK DIAGRAM (FOR AU-520/S ONLY)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


SW1
SW5
LINEAR
FM
CH1/3
STEREO
CH2/4
IC5
IC5
IC1
IC1
P253
3
AUD RF OUT
P253
1
AUD MON OUT
VR2
MONITOR LEVEL
IC3
IC3
1KHz OSC
VR1
MONITOR LEVEL
SUB1
IC4
IC4
P254
1
HP (L) OUT
P254
2
HR (R) OUT
P254
3
GND
Q5
Ⓗ ON
Q6
Ⓗ ON
HEADPHONE JACK

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

AUDIO INPUT BLOCK DIAGRAM (FOR AU-520/S ONLY)


AUDIO INPUT CH1
GND
AUDIO CH1(2)
AUDIO CH1(3)
AUDIO INPUT CH2
GND
AUDIO CH2(2)
AUDIO CH2(3)
AUDIO INPUT CH3
GND
AUDIO CH3(2)
AUDIO CH3(3)
AUDIO INPUT CH4
GND
AUDIO CH4(2)
AUDIO CH4(3)
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
TP12
(H)
(C)
SW1-1
SW1-2
SW1-3
SW1-4
SW2-1
SW2-2
SW2-3
SW2-4
SW3-1
SW3-2
SW3-3
SW3-4
SW4-1
SW4-2
SW4-3
SW4-4
-60
-20
0
ON
OFF
T1
T2
T3
T4
T5
IC1
IC2
IC3
IC4
IC5
SW5
SW6
SW7
SW8
SW9
LINE
CAM
CH1
CH2
-30
P231
P232
P233
+9V
+48V
OPEN
CAM MIC 2
CAM MIC 3
CH1 REC VR OUT
CH1 REC VR IN (TO LINEAR AUDIO SECTION)
CH1 P.B OUT (FROM LINEAR AUDIO SECTION)
CH1 P.B VR IN (TO LINEAR AUDIO SECTION)
CH3 REC VR IN (TO FM AUDIO SECTION)
CH3 P.B OUT (FROM FM AUDIO SECTION)
CH3 P.B VR IN (TO FM AUDIO SECTION)
CH2 REC VR OUT
CH3 REC VR OUT
CH2 REC VR IN (TO LINEAR AUDIO SECTION)
CH2 P.B OUT (FROM LINEAR AUDIO SECTION)
CH2 P.B VR IN (TO LINEAR AUDIO SECTION)
CH4 REC VR IN (TO FM AUDIO SECTION)
CH4 P.B OUT (FROM FM AUDIO SECTION)
CH4 P.B VR OUT (TO FM AUDIO SECTION)
CH4 REC VR OUT
P710
P711
P712
P713
VR701
VR702
VR703
VR704
VR705
VR706
VR707
VR708
CH1 REC
CH1 P.B
CH3 REC
CH3 P.B
CH2 REC
CH2 P.B
CH4 REC
CH4 P.B
VR1
VR2

)NLY)

NOTE:
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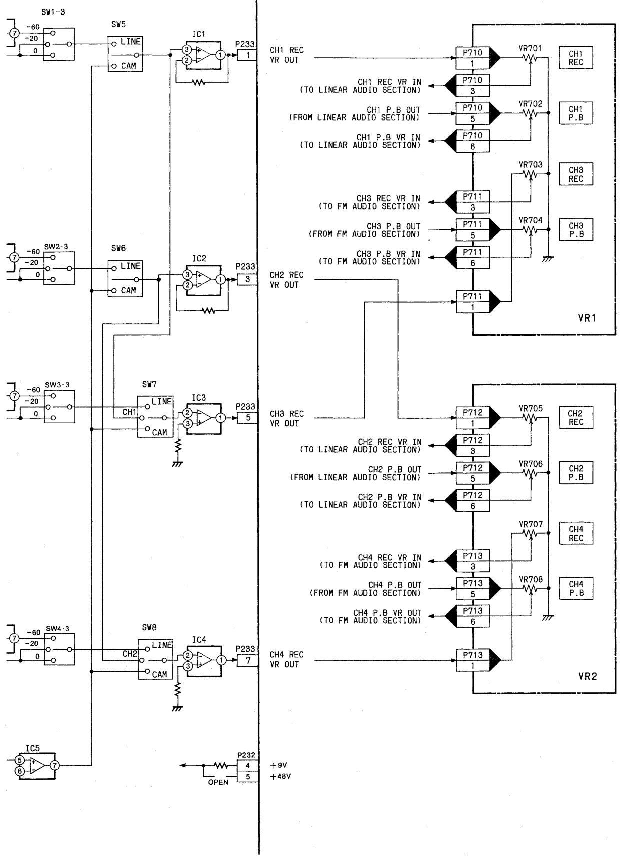
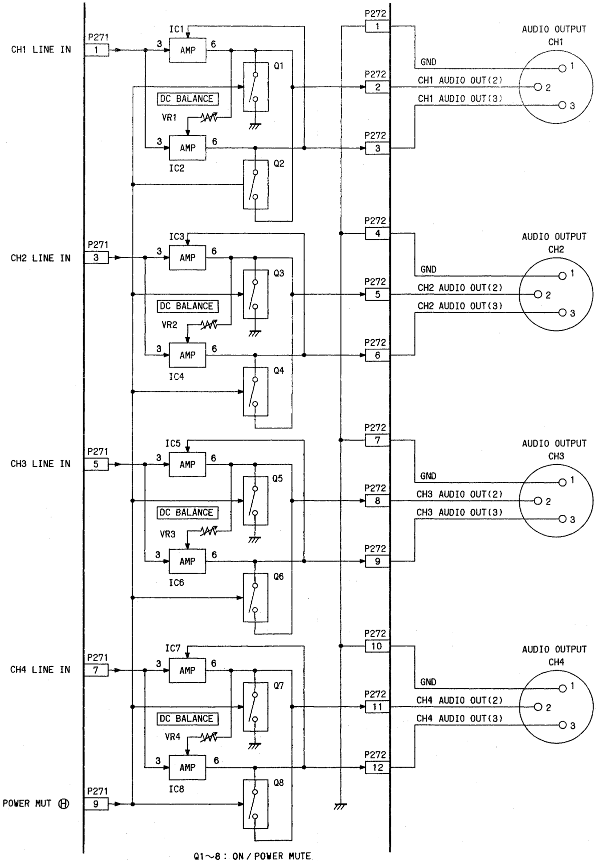

SW1-3
-60
-20
0
SW5
LINE
CAM
IC1
P233
1
CH1 REC VR OUT
SW2-3
SW6
IC2
P233
3
CH2 REC VR OUT
SW3-3
SW7
CH1
IC3
P233
5
CH3 REC VR OUT
SW4-3
SW8
CH2
IC4
P233
7
CH4 REC VR OUT
IC5
P232
4
5
OPEN
+9V
+48V
P710
VR701
CH1 REC
CH1 REC VR IN (TO LINEAR AUDIO SECTION)
CH1 P.B OUT (FROM LINEAR AUDIO SECTION)
VR702
CH1 P.B
CH1 P.B VR IN (TO LINEAR AUDIO SECTION)
VR703
CH3 REC
CH3 REC VR IN (TO FM AUDIO SECTION)
P711
CH3 P.B OUT (FROM FM AUDIO SECTION)
VR704
CH3 P.B
CH3 P.B VR IN (TO FM AUDIO SECTION)
VR1
P712
VR705
CH2 REC
CH2 REC VR IN (TO LINEAR AUDIO SECTION)
CH2 P.B OUT (FROM LINEAR AUDIO SECTION)
VR706
CH2 P.B
CH2 P.B VR IN (TO LINEAR AUDIO SECTION)
VR707
CH4 REC
P713
CH4 REC VR IN (TO FM AUDIO SECTION)
CH4 P.B OUT (FROM FM AUDIO SECTION)
VR708
CH4 P.B
CH4 P.B VR OUT (TO FM AUDIO SECTION)
VR2

AUDIO OUTPUT (ON POWER SUPPLY CIRCUIT) BLOCK DIAGRAM (FOR AU-520/S ONLY)


P271
CH1 LINE IN
CH2 LINE IN
CH3 LINE IN
CH4 LINE IN
POWER MUT Ⓗ
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
AMP
DC BALANCE
VR1
VR2
VR3
VR4
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
P272
GND
CH1 AUDIO OUT(2)
CH1 AUDIO OUT(3)
CH2 AUDIO OUT(2)
CH2 AUDIO OUT(3)
CH3 AUDIO OUT(2)
CH3 AUDIO OUT(3)
CH4 AUDIO OUT(2)
CH4 AUDIO OUT(3)
AUDIO OUTPUT CH1
AUDIO OUTPUT CH2
AUDIO OUTPUT CH3
AUDIO OUTPUT CH4

Q1~8 : ON / POWER MUTE

SERVO BLOCK DIAGRAM (FOR AU-520/S)

NOTE:
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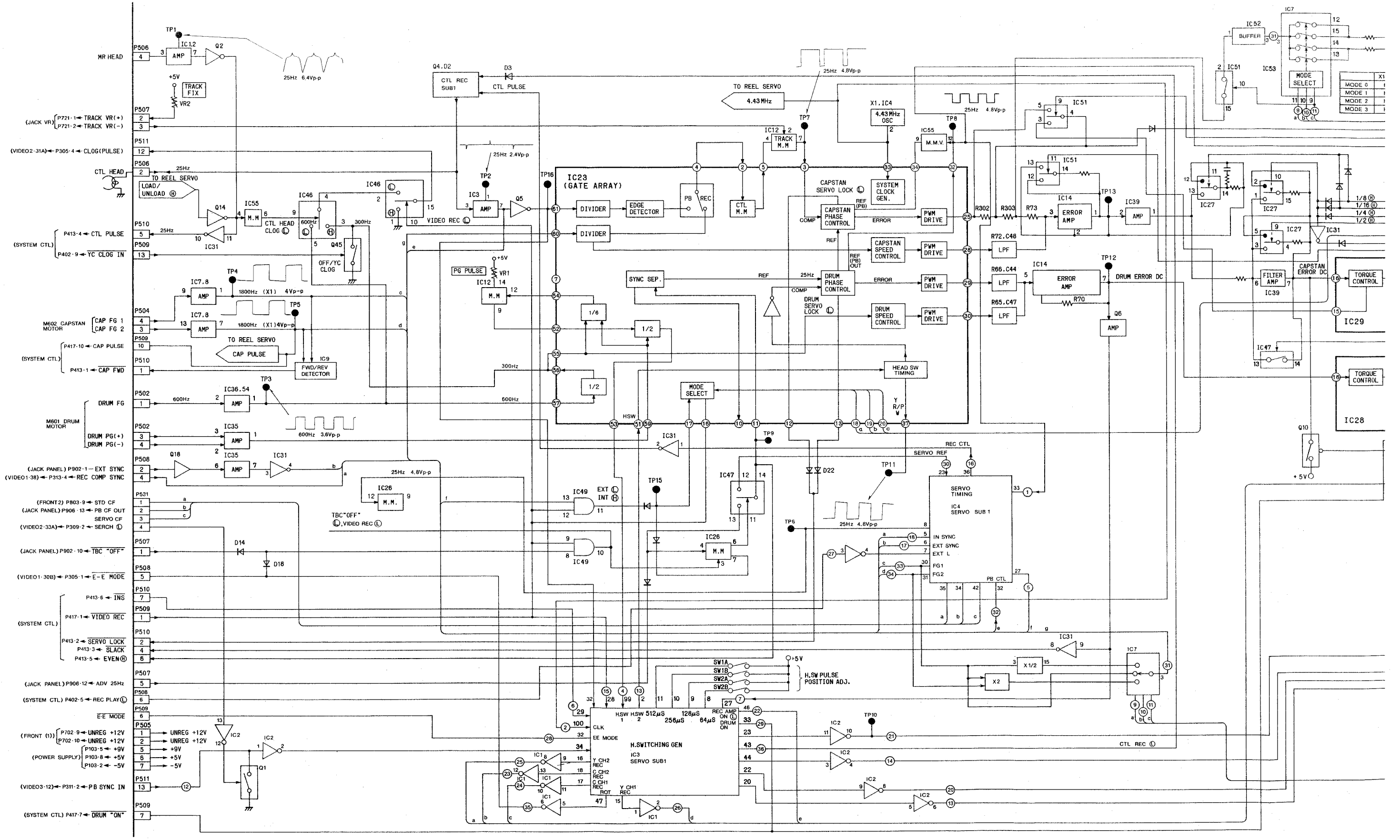
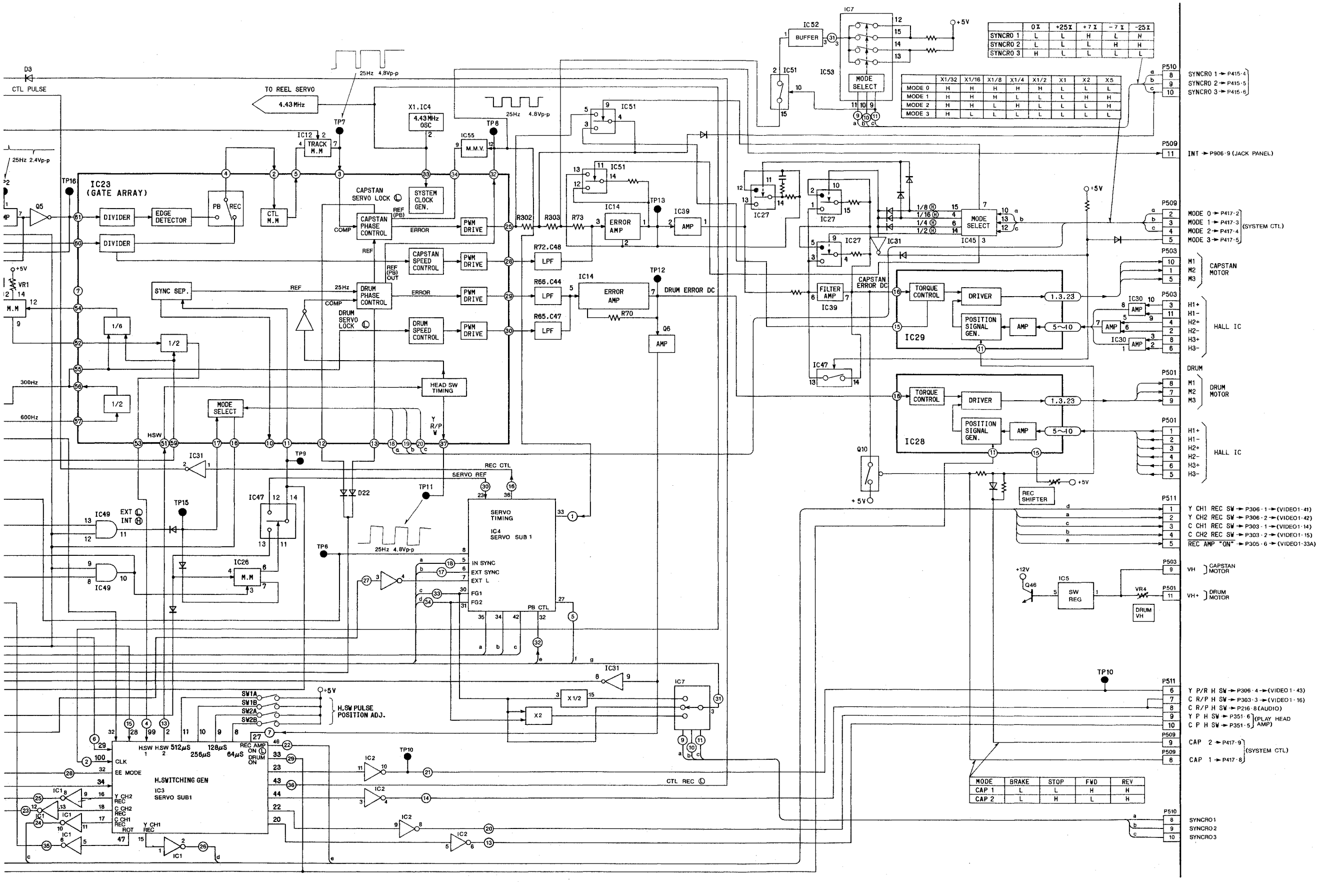
AU-505 = USED FOR AU-505 ONLY



MR HEAD
P506
TP1
IC1,2
AMP
Q2
25Hz 6.4Vp-p
+5V
TRACK FIX
VR2
P507
(JACK VR) P721-1 TRACK VR(+)
P721-2 TRACK VR(-)
P511
(VIDEO2-31A) P305-4 CLOG(PULSE)
CTL HEAD
25Hz
TO REEL SERVO
LOAD/UNLOAD Ⓗ
Q14
IC55
M.M
IC46
CTL HEAD CLOG Ⓛ
600Hz
300Hz
Q45
OFF/YC CLOG
P510
(SYSTEM CTL) P413-4 CTL PULSE
P402-9 YC CLOG IN
P509
IC31
TP4
IC7.8
AMP
1800Hz (X1) 4Vp-p
TP5
1800Hz (X1)4Vp-p
M602 CAPSTAN MOTOR
CAP FG 1
CAP FG 2
P504
TO REEL SERVO
CAP PULSE
IC9
FWD/REV DETECTOR
(SYSTEM CTL) P417-10 CAP PULSE
P413-1 CAP FWD
TP3
IC36.54
600Hz
M601 DRUM MOTOR
DRUM FG
DRUM PG(+)
DRUM PG(-)
P502
IC35
600Hz 3.6Vp-p
Q18
(JACK PANEL) P902-1 EXT SYNC
(VIDEO1-38) P313-4 REC COMP SYNC
P508
25Hz 4.8Vp-p
IC26
M.M.
P531
(FRONT2) P803-9 STD CF
(JACK PANEL) P906-13 PB CF OUT
SERVO CF
(VIDEO2-33A) P309-2 SERCH Ⓛ
TBC"OFF" Ⓛ,VIDEO REC Ⓛ
D14
D18
(JACK PANEL) P902-10 TBC "OFF"
(VIDEO1-30B) P305-1 E-E MODE
P413-6 INS
P417-1 VIDEO REC
(SYSTEM CTL)
P413-2 SERVO LOCK
P413-3 SLACK
P413-5 EVEN Ⓗ
(JACK PANEL) P906-12 ADV 25Hz
(SYSTEM CTL) P402-5 REC PLAY Ⓛ
E-E MODE
P505
(FRONT (1)) P702-9 UNREG +12V
P702-10 UNREG +12V
(POWER SUPPLY) P103-5 +9V
P103-8 +5V
P103-2 -5V
UNREG +12V
UNREG +12V
+9V
+5V
-5V
IC2
Q1
(VIDEO3-12) P311-2 PB SYNC IN
(SYSTEM CTL) P417-7 DRUM "ON"
Q4.D2
CTL REC SUB1
D3
CTL PULSE
25Hz 2.4Vp-p
TP2
IC3
Q5
VIDEO REC Ⓛ
PG PULSE
VR1
IC12
M.M
TP16
IC23 (GATE ARRAY)
DIVIDER
EDGE DETECTOR
PB
REC
CTL M.M
1/6
1/2
SYNC SEP.
MODE SELECT
HSW
IC49
EXT Ⓛ
INT Ⓗ
TP15
IC47
IC26
M.M
TO REEL SERVO
4.43MHz
25Hz 4.8Vp-p
TP7
IC12
TRACK M.M
X1.IC4
4.43MHz OSC
TP8
IC55
M.M.V.
25Hz 4.8Vp-p
CAPSTAN SERVO LOCK Ⓛ
SYSTEM CLOCK GEN.
CAPSTAN PHASE CONTROL
REF
REF (PB)
COMP
ERROR
PWM DRIVE
CAPSTAN SPEED CONTROL
REF (PB) OUT
25Hz
DRUM PHASE CONTROL
DRUM SERVO LOCK Ⓛ
DRUM SPEED CONTROL
HEAD SW TIMING
Y R/P
TP9
D22
TP11
TP6
25Hz 4.8Vp-p
REC CTL
SERVO REF
SERVO TIMING
IC4 SERVO SUB 1
IN SYNC
EXT SYNC
EXT L
FG1
FG2
PB CTL
R302
R303
R73
IC14
ERROR AMP
TP13
IC39
AMP
R72.C48
LPF
R66.C44
LPF
ERROR AMP
R70
TP12
DRUM ERROR DC
R65.C47
LPF
Q6
AMP
IC52
BUFFER
IC51
IC53
IC7
MODE SELECT
MODE 0
MODE 1
MODE 2
MODE 3
IC27
1/8 Ⓗ
1/16 Ⓗ
1/4 Ⓗ
1/2 Ⓗ
FILTER AMP
CAPSTAN ERROR DC
TORQUE CONTROL
IC29
IC47
TORQUE CONTROL
IC28
Q10
+5V
IC31
IC7
X1/2
X2
SW1A
SW1B
SW2A
SW2B
+5V
H.SW PULSE POSITION ADJ.
HSW 1
HSW 2
512μS
256μS
128μS
64μS
REC AMP ON Ⓛ
DRUM ON
CLK
EE MODE
H.SWITCHING GEN
IC3 SERVO SUB1
Y CH2 REC
C CH2 REC
C CH1 REC
ROT
Y CH1 REC
IC1
IC2
TP10
CTL REC Ⓛ

SERVO BLOCK DIAGRAM

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


D3
CTL PULSE
25Hz 2.4Vp-p
25Hz 4.8Vp-p
TO REEL SERVO
4.43MHz
TP7
X1. IC4
4.43MHz OSC
TP8
IC12
TRACK M.M
IC55
M.M.V.
TP16
IC23 (GATE ARRAY)
Q5
DIVIDER
EDGE DETECTOR
PB
REC
CTL M.M
CAPSTAN SERVO LOCK Ⓛ
SYSTEM CLOCK GEN.
CAPSTAN PHASE CONTROL
REF (PB)
COMP
ERROR
REF
PWM DRIVE
CAPSTAN SPEED CONTROL
REF (PB) OUT
SYNC SEP.
25Hz
DRUM PHASE CONTROL
DRUM SERVO LOCK Ⓛ
DRUM SPEED CONTROL
VR1
M.M
1/6
1/2
300Hz
600Hz
HEAD SW TIMING
MODE SELECT
Y R/P
HSW
IC31
TP9
R302
R303
R73
ERROR AMP
IC14
R72.C48
LPF
R66.C44
R65.C47
R70
TP13
TP12
DRUM ERROR DC
Q6
AMP
IC39
IC51
IC27
IC52
BUFFER
IC7
IC53
MODE SELECT
+5V
1/8 Ⓗ
1/16 Ⓗ
1/4 Ⓗ
1/2 Ⓗ
IC45
CAPSTAN ERROR DC
FILTER AMP
TORQUE CONTROL
DRIVER
POSITION SIGNAL GEN.
IC29
IC28
IC30
IC47
Q10
REC SHIFTER
REC CTL
SERVO REF
TP11
SERVO TIMING
IC4
SERVO SUB 1
IN SYNC
EXT SYNC
EXT L
FG1
FG2
PB CTL
IC49
EXT Ⓛ
INT Ⓗ
TP15
TP6
IC26
D22
+12V
Q46
IC5
SW REG
VR4
DRUM VH
IC31
X1/2
X2
TP10
SW1A
SW1B
SW2A
SW2B
H.SW PULSE POSITION ADJ.
H.SW
512μS
256μS
128μS
64μS
REC AMP ON Ⓛ
DRUM ON
CLK
EE MODE
H.SWITCHING GEN
IC3
SERVO SUB1
Y CH2 REC
C CH2 REC
C CH1 REC
ROT
Y CH1 REC
IC1
IC2
CTL REC Ⓛ
P510
SYNCRO 1 → P415-4
SYNCRO 2 → P415-5
SYNCRO 3 → P415-6
P509
INT → P906-9 (JACK PANEL)
MODE 0 → P417-2
MODE 1 → P417-3
MODE 2 → P417-4
MODE 3 → P417-5
(SYSTEM CTL)
P503
M1
M2
M3
CAPSTAN MOTOR
H1+
H1-
H2+
H2-
H3+
H3-
HALL IC
DRUM
P501
DRUM MOTOR
P511
Y CH1 REC SW → P306-1 → (VIDEO1-41)
Y CH2 REC SW → P306-2 → (VIDEO1-42)
C CH1 REC SW → P303-1 → (VIDEO1-14)
C CH2 REC SW → P303-2 → (VIDEO1-15)
REC AMP "ON" → P305-6 → (VIDEO1-33A)
VH
CAPSTAN MOTOR
VH+
DRUM MOTOR
Y P/R H SW → P306-4 → (VIDEO1-43)
C R/P H SW → P303-3 → (VIDEO1-16)
C R/P H SW → P216-8 (AUDIO)
Y P H SW → P351-6
C P H SW → P351-5
(PLAY HEAD AMP)
CAP 2 → P417-9
CAP 1 → P417-8
(SYSTEM CTL)
SYNCRO1
SYNCRO2
SYNCRO3

	0%	+25%	+7%	-7%	-25%
SYNCRO 1	L	L	H	L	H
SYNCRO 2	L	L	L	H	H
SYNCRO 3	H	L	L	L	L

	X1/32	X1/16	X1/8	X1/4	X1/2	X1	X2	X5
MODE 0	H	H	H	H	H	L	L	L
MODE 1	H	H	H	L	L	L	H	H
MODE 2	H	H	L	H	L	L	L	H
MODE 3	H	L	L	L	L	L	L	L

MODE	BRAKE	STOP	FWD	REV
CAP 1	L	L	H	H
CAP 2	L	H	L	H

REVERSE SIDE
REEL SERVO BLOCK DIAGRAM

REEL SERVO BLOCK DIAGRAM (FOR AU-520/S)

NOTE:
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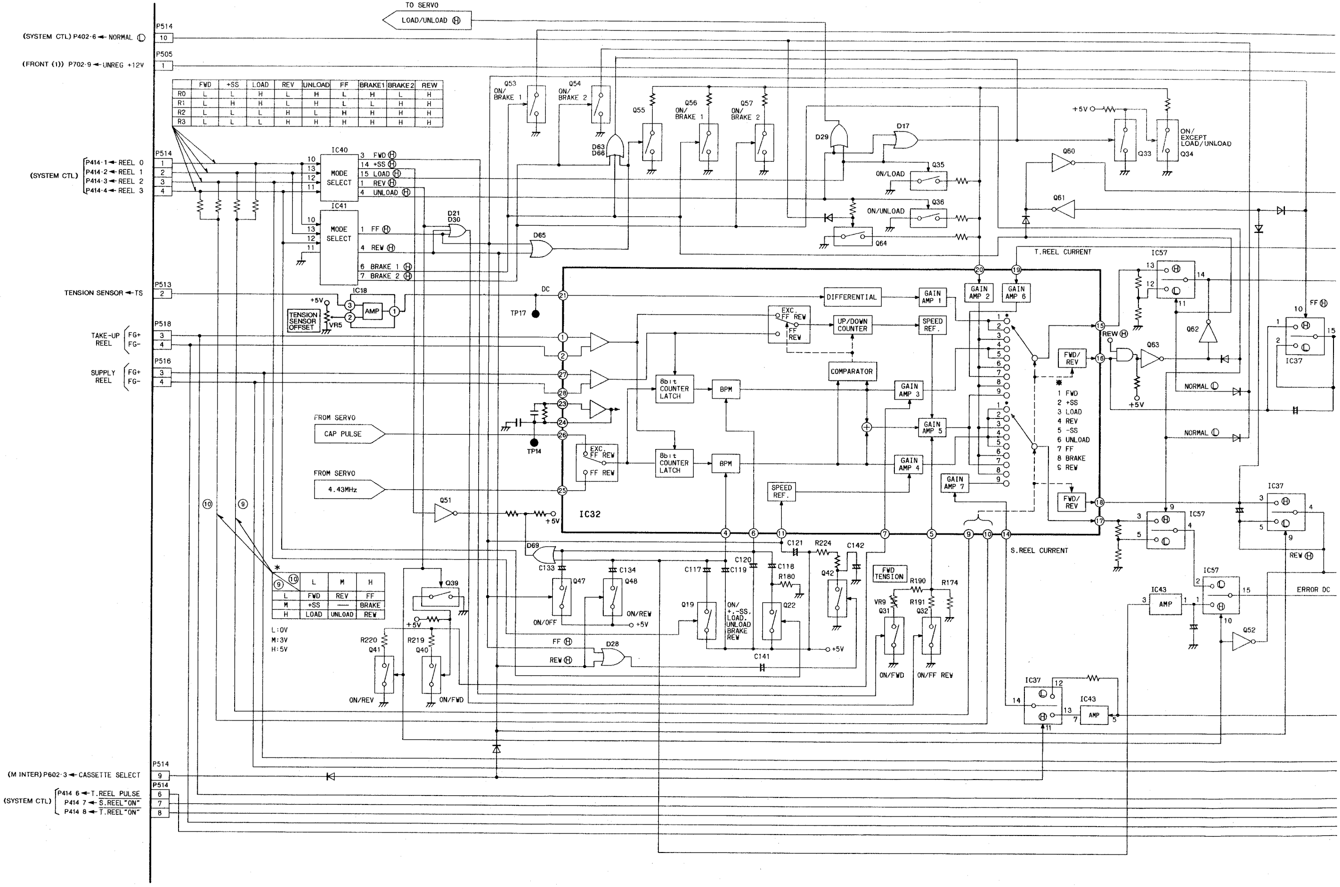

TO SERVO
LOAD/UNLOAD Ⓗ
(SYSTEM CTL) P402-6 ◄ NORMAL Ⓛ
P514
10
(FRONT (1)) P702-9 ◄ UNREG +12V
P505
1
(SYSTEM CTL) P414-1 ◄ REEL 0
P414-2 ◄ REEL 1
P414-3 ◄ REEL 2
P414-4 ◄ REEL 3
IC40
MODE SELECT
3 FWD Ⓗ
14 +SS Ⓗ
15 LOAD Ⓗ
1 REV Ⓗ
4 UNLOAD Ⓗ
IC41
MODE SELECT
1 FF Ⓗ
4 REW Ⓗ
6 BRAKE 1 Ⓗ
7 BRAKE 2 Ⓗ
D21 D30
D65
Q53 ON/BRAKE 1
Q54 ON/BRAKE 2
D63 D66
Q55
Q56 ON/BRAKE 1
Q57 ON/BRAKE 2
D29
D17
Q35 ON/LOAD
Q36 ON/UNLOAD
Q64
+5V
Q33
Q34 ON/EXCEPT LOAD/UNLOAD
Q60
Q61
T.REEL CURRENT
IC57
P513
TENSION SENSOR ◄ TS
IC18
AMP
TENSION SENSOR OFFSET
VR5
DC
TP17
P518
TAKE-UP REEL FG+ FG-
P516
SUPPLY REEL FG+ FG-
DIFFERENTIAL
GAIN AMP 1
GAIN AMP 2
GAIN AMP 6
EXC. FF REW
UP/DOWN COUNTER
SPEED REF.
COMPARATOR
8bit COUNTER LATCH
BPM
GAIN AMP 3
GAIN AMP 5
GAIN AMP 4
GAIN AMP 7
SPEED REF.
FWD/REV
REW Ⓗ
Q63
Q62
IC37
FF Ⓗ
1 FWD
2 +SS
3 LOAD
4 REV
5 -SS
6 UNLOAD
7 FF
8 BRAKE
9 REW
NORMAL Ⓛ
FROM SERVO
CAP PULSE
TP14
FROM SERVO
4.43MHz
Q51
IC32
S.REEL CURRENT
REW Ⓗ
ERROR DC
IC43 AMP
Q52
D69
C133 Q47
C134 Q48
ON/OFF
ON/REW
+5V
C117 C119
C120
C121 R224 C142
C118 R180
Q42
Q19
ON/ +,-SS, LOAD, UNLOAD BRAKE REW
Q22
FF Ⓗ
REW Ⓗ
D28
C141
FWD TENSION
R190 R174
VR9 Q31
R191 Q32
ON/FWD
ON/FF REW
IC37
IC43 AMP
Q39
R220 Q41
R219 Q40
ON/REV
ON/FWD
(M INTER) P602-3 ◄ CASSETTE SELECT
P514
9
(SYSTEM CTL) P414 6 ◄ T.REEL PULSE
P414 7 ◄ S.REEL"ON"
P414 8 ◄ T.REEL"ON"

	FWD	+SS	LOAD	REV	UNLOAD	FF	BRAKE1	BRAKE2	REW
R0	L	L	H	L	H	L	H	L	H
R1	L	H	H	L	H	L	L	H	H
R2	L	L	L	H	L	H	H	H	H
R3	L	L	L	H	H	H	H	H	H

*

⑨ \ ⑩	L	M	H
L	FWD	REV	FF
M	+SS	——	BRAKE
H	LOAD	UNLOAD	REW

L:0V
M:3V
H:5V

NOTE:
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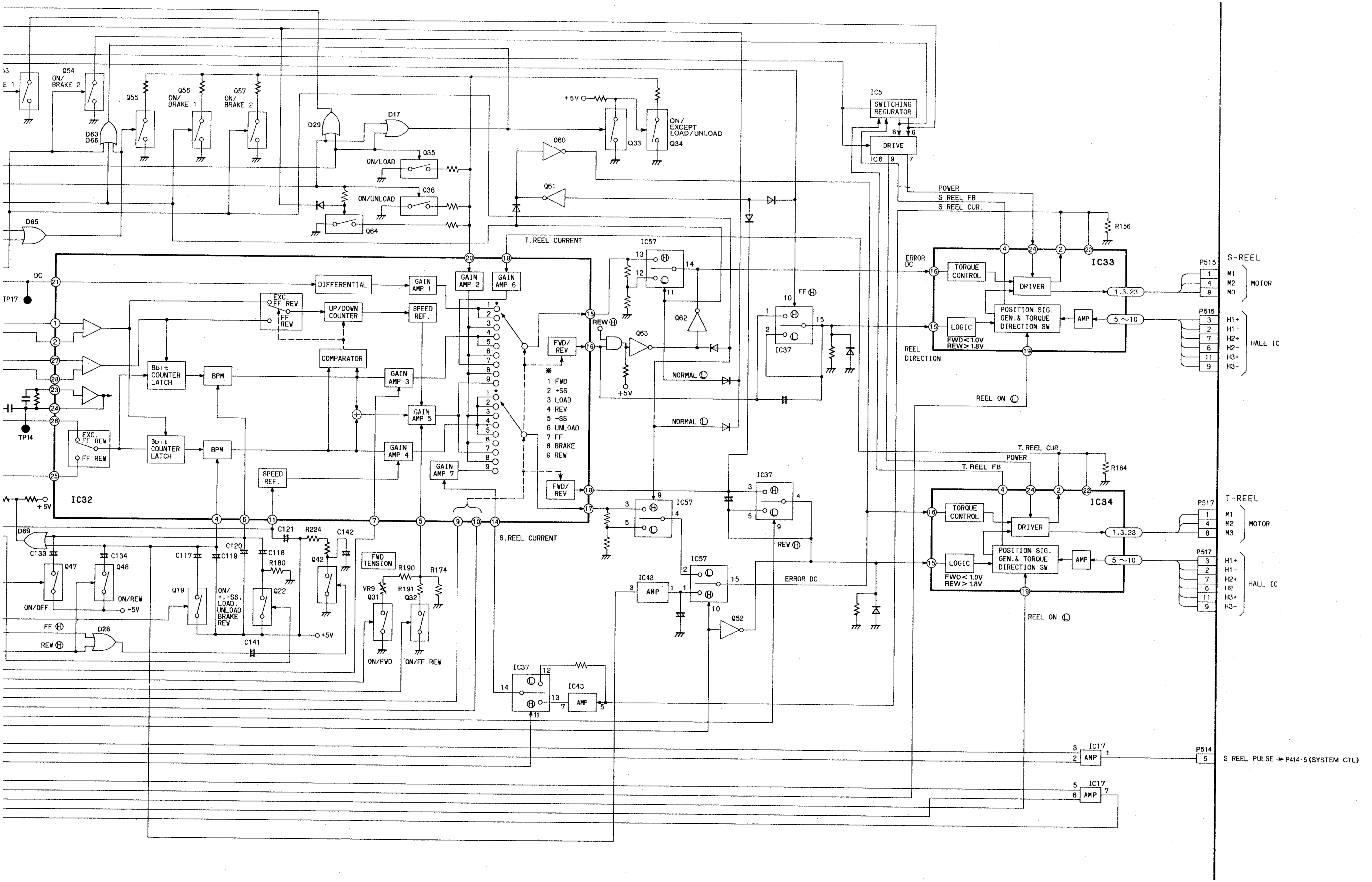
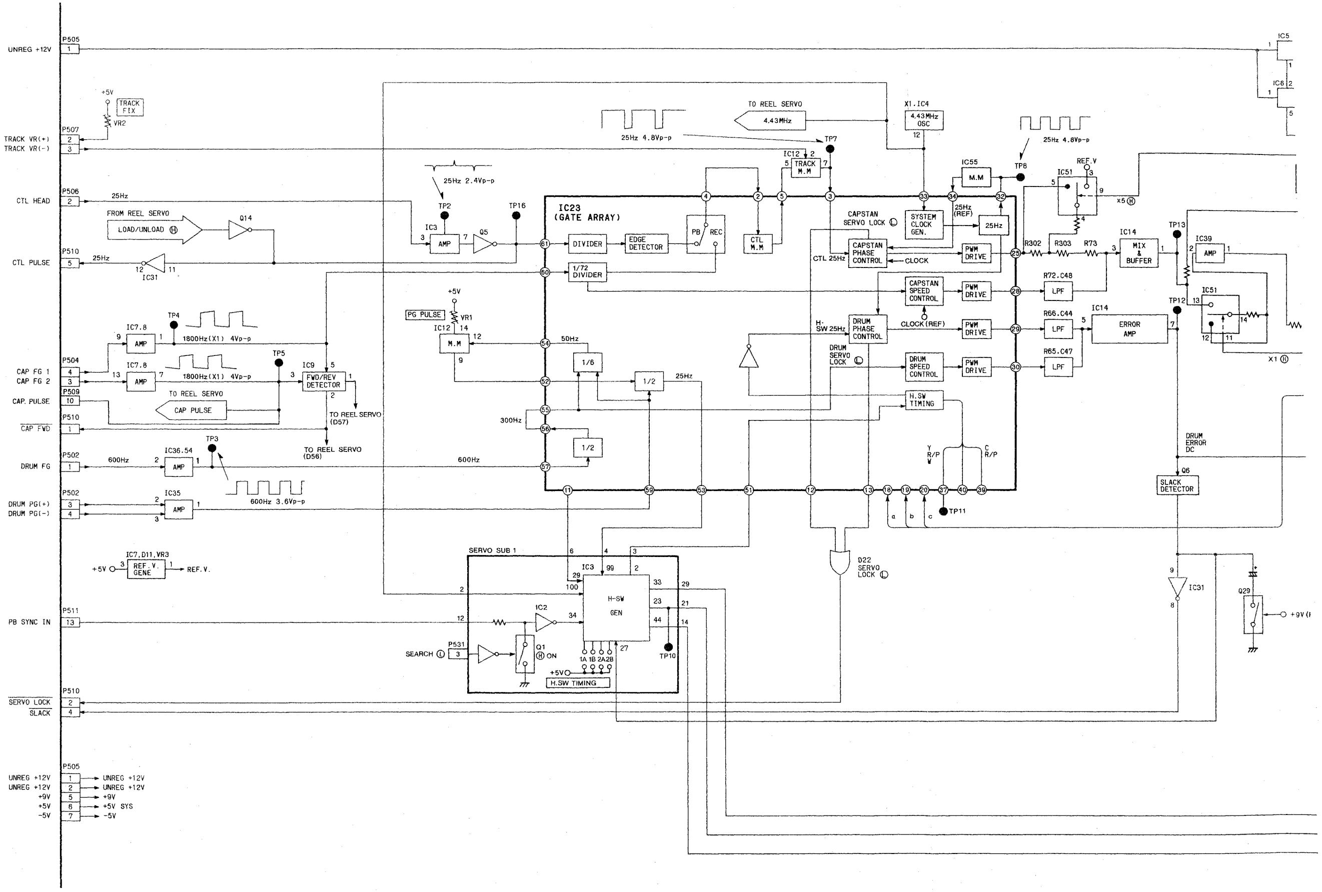
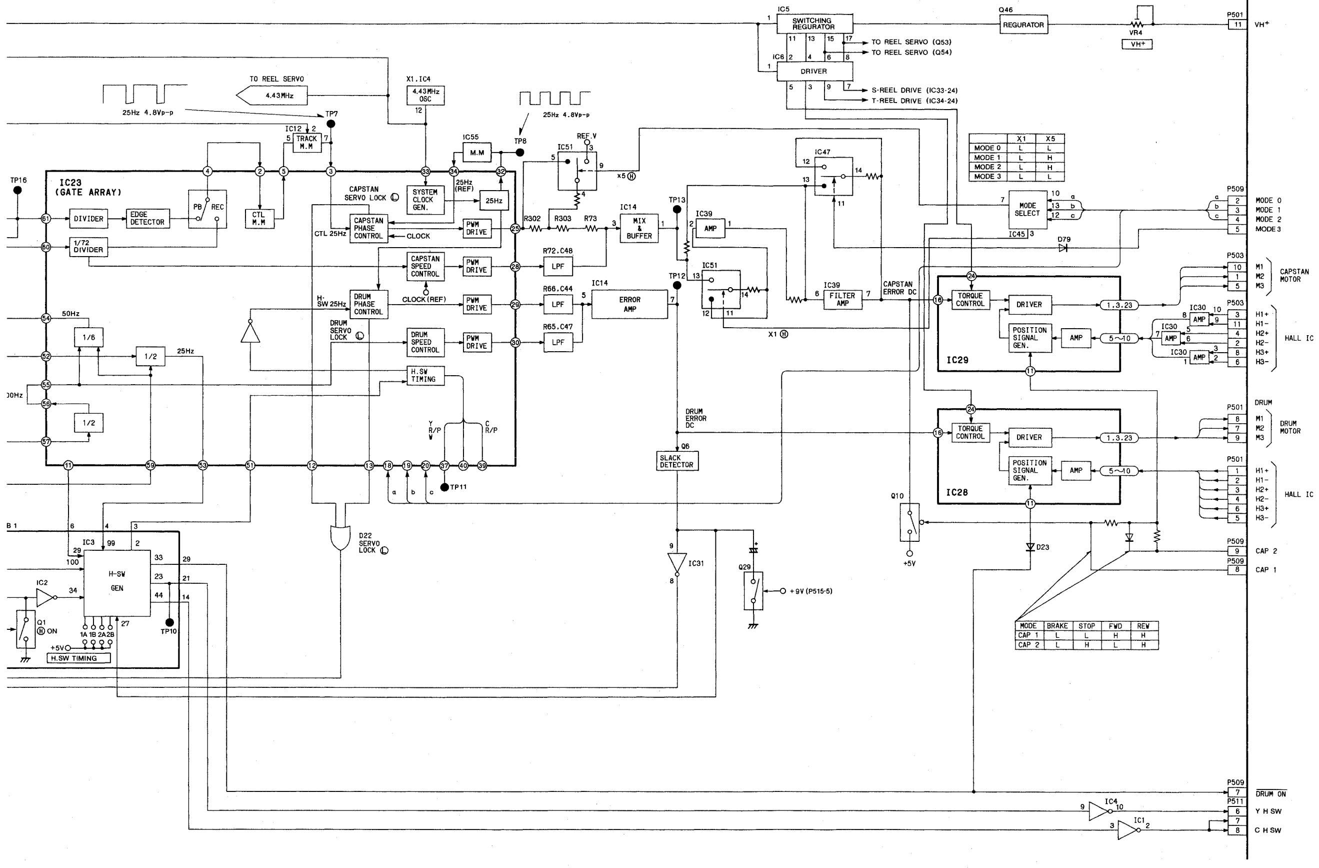


Q54
ON/ BRAKE 2
Q55
Q56
ON/ BRAKE 1
Q57
ON/ BRAKE 2
D63 D66
D29
D17
Q35
ON/LOAD
Q36
ON/UNLOAD
Q64
D65
Q60
Q61
+5V
Q33
Q34
ON/ EXCEPT LOAD/UNLOAD
IC5
SWITCHING REGURATOR
DRIVE
IC6
POWER
S REEL FB
S REEL CUR.
R156
T.REEL CURRENT
IC57
DC
TP17
TP14
DIFFERENTIAL
GAIN AMP 1
GAIN AMP 2
GAIN AMP 6
EXC. FF REW
UP/DOWN COUNTER
SPEED REF.
COMPARATOR
8bit COUNTER LATCH
BPM
GAIN AMP 3
GAIN AMP 5
GAIN AMP 4
GAIN AMP 7
SPEED REF.
FWD/ REV
REW Ⓗ
Q63
Q62
NORMAL Ⓛ
1 FWD
2 +SS
3 LOAD
4 REV
5 -SS
6 UNLOAD
7 FF
8 BRAKE
9 REW
IC32
S.REEL CURRENT
FF Ⓗ
IC37
REEL DIRECTION
REEL ON Ⓛ
ERROR DC
IC33
TORQUE CONTROL
DRIVER
POSITION SIG. GEN.& TORQUE DIRECTION SW
LOGIC
FWD<1.0V REW>1.8V
AMP
1.3.23
5～10
P515
S-REEL
M1
M2
M3
MOTOR
H1+
H1-
H2+
H2-
H3+
H3-
HALL IC
T.REEL CUR.
POWER
T.REEL FB
R164
IC34
P517
T-REEL
D69
C133
Q47
C134
Q48
ON/OFF
ON/REW
C117
C119
C120
Q19
ON/ +,-SS. LOAD. UNLOAD BRAKE REW
C118
R180
Q22
C121
R224
C142
Q42
C141
FWD TENSION
R190
R174
VR9
R191
Q31
Q32
ON/FWD
ON/FF REW
FF Ⓗ
REW Ⓗ
D28
IC43
AMP
Q52
REW Ⓗ
IC17
P514
S REEL PULSE → P414-5 (SYSTEM CTL)

SERVO BLOCK DIAGRAM (FOR AU-505)



UNREG +12V
P505
1
IC5
IC6
TRACK VR(+)
TRACK VR(-)
P507
+5V
TRACK FIX
VR2
CTL HEAD
P506
25Hz
FROM REEL SERVO
LOAD/UNLOAD Ⓗ
Q14
CTL PULSE
P510
IC31
CAP FG 1
CAP FG 2
P504
CAP. PULSE
P509
CAP FWD
DRUM FG
P502
DRUM PG(+)
DRUM PG(-)
IC7.8
AMP
TP4
1800Hz(X1) 4Vp-p
TP5
IC9
FWD/REV DETECTOR
TO REEL SERVO
CAP PULSE
TO REEL SERVO (D57)
TO REEL SERVO (D56)
IC36.54
TP3
600Hz
IC35
600Hz 3.6Vp-p
IC7, D11, VR3
REF. V. GENE
REF. V.
PB SYNC IN
P511
13
SERVO LOCK
SLACK
UNREG +12V
+9V
+5V
-5V
+5V SYS
25Hz 2.4Vp-p
TP2
TP16
IC3
Q5
PG PULSE
VR1
IC12
M.M
50Hz
300Hz
25Hz 4.8Vp-p
TO REEL SERVO
4.43MHz
TP7
X1.IC4
4.43MHz OSC
IC12
TRACK M.M
IC55
TP8
REF.V
IC51
x5 Ⓗ
IC23 (GATE ARRAY)
DIVIDER
EDGE DETECTOR
PB
REC
CTL M.M
1/72 DIVIDER
1/6
1/2
CAPSTAN SERVO LOCK Ⓛ
SYSTEM CLOCK GEN.
25Hz (REF)
25Hz
CAPSTAN PHASE CONTROL
CTL 25Hz
CLOCK
PWM DRIVE
CAPSTAN SPEED CONTROL
H-SW 25Hz
DRUM PHASE CONTROL
CLOCK(REF)
DRUM SERVO LOCK Ⓛ
DRUM SPEED CONTROL
H.SW TIMING
Y R/P
C R/P
TP11
R302
R303
R73
IC14
MIX & BUFFER
TP13
IC39
AMP
R72.C48
LPF
R66.C44
R65.C47
ERROR AMP
TP12
X1 Ⓗ
DRUM ERROR DC
Q6
SLACK DETECTOR
IC31
Q29
+9V
D22 SERVO LOCK Ⓛ
SERVO SUB 1
IC3
H-SW GEN
IC2
SEARCH Ⓛ
P531
Q1
Ⓗ ON
1A 1B 2A 2B
+5V
H.SW TIMING
TP10


IC5
SWITCHING REGURATOR
Q46
REGURATOR
VR4
VH+
P501
VH+
TO REEL SERVO (Q53)
TO REEL SERVO (Q54)
IC6
DRIVER
S-REEL DRIVE (IC33-24)
T-REEL DRIVE (IC34-24)
TO REEL SERVO
4.43MHz
X1.IC4
4.43MHz OSC
25Hz 4.8Vp-p
TP7
TP8
TP16
IC12
TRACK M.M
IC55
M.M
IC51
REF.V
x5 Ⓗ
IC23 (GATE ARRAY)
DIVIDER
EDGE DETECTOR
PB
REC
CTL M.M
1/72 DIVIDER
CAPSTAN SERVO LOCK Ⓛ
SYSTEM CLOCK GEN.
25Hz (REF)
25Hz
CAPSTAN PHASE CONTROL
CTL 25Hz
CLOCK
PWM DRIVE
CAPSTAN SPEED CONTROL
DRUM PHASE CONTROL
H-SW 25Hz
CLOCK (REF)
DRUM SERVO LOCK Ⓛ
DRUM SPEED CONTROL
H.SW TIMING
Y R/P
C R/P
50Hz
1/6
1/2
25Hz
TP11
R302
R303
R73
IC14
MIX & BUFFER
R72.C48
LPF
R66.C44
R65.C47
ERROR AMP
TP13
TP12
IC39
AMP
IC51
X1 Ⓗ
IC47
IC39
FILTER AMP
CAPSTAN ERROR DC
DRUM ERROR DC
Q6
SLACK DETECTOR
IC45
MODE SELECT
D79
P509
MODE 0
MODE 1
MODE 2
MODE 3
P503
M1
M2
M3
CAPSTAN MOTOR
IC29
TORQUE CONTROL
DRIVER
POSITION SIGNAL GEN.
AMP
5~10
1.3.23
IC30
H1+
H1-
H2+
H2-
H3+
H3-
HALL IC
IC28
DRUM
DRUM MOTOR
Q10
+5V
D23
CAP 2
CAP 1
IC31
Q29
+9V (P515-5)
D22
SERVO LOCK Ⓛ
IC3
H-SW GEN
IC2
Q1
Ⓗ ON
1A 1B 2A 2B
+5V
H.SW TIMING
TP10
IC4
IC1
P511
DRUM ON
Y H SW
C H SW

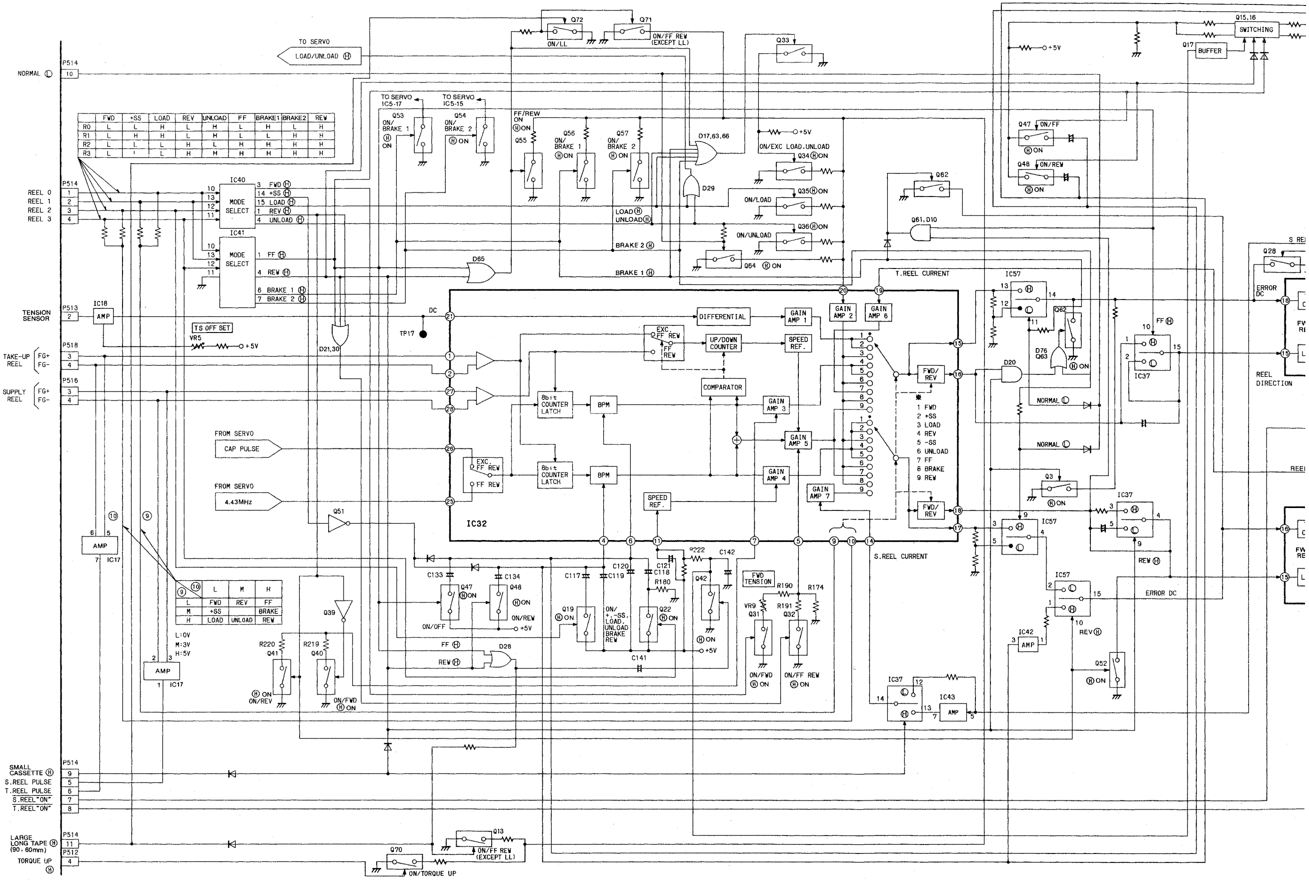
	X1	X5
MODE 0	L	L
MODE 1	L	H
MODE 2	L	H
MODE 3	L	L

MODE	BRAKE	STOP	FWD	REW
CAP 1	L	L	H	H
CAP 2	L	H	L	H

REVERSE SIDE

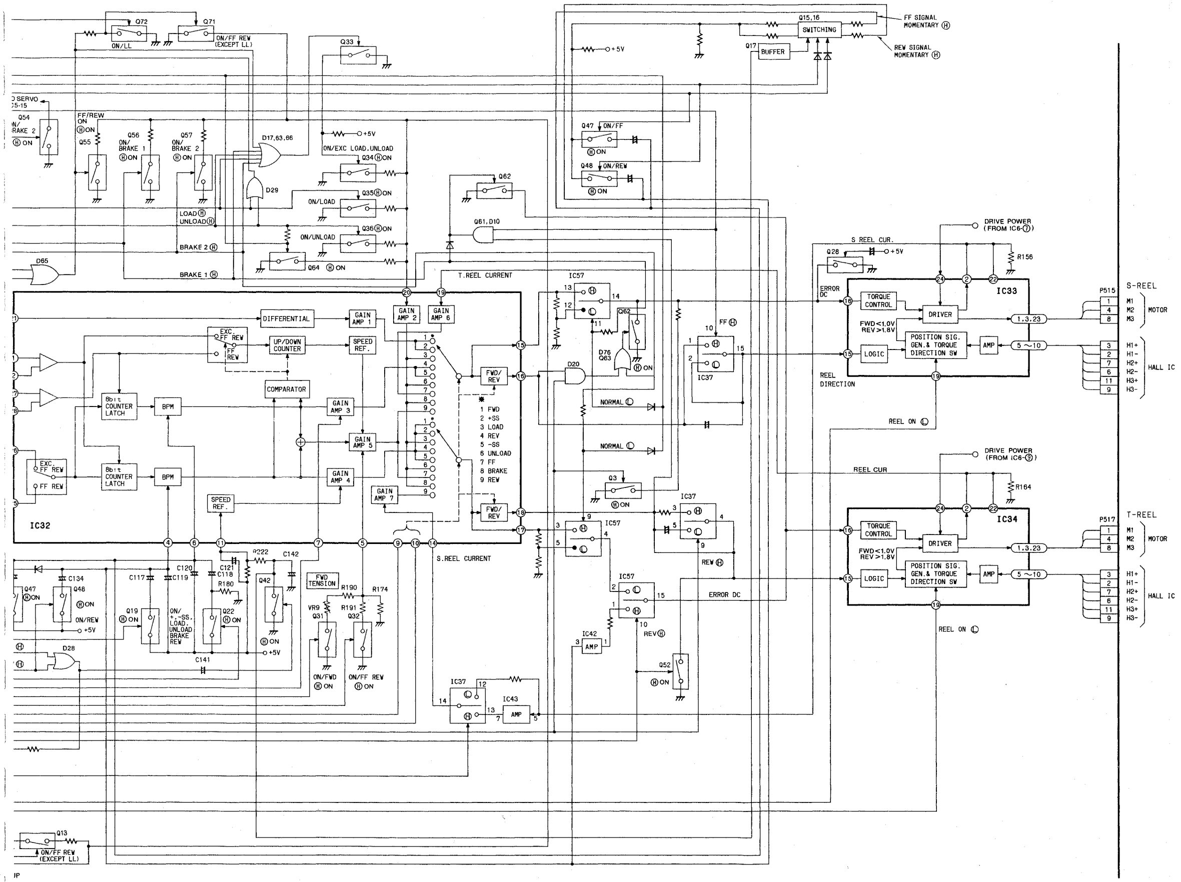
REEL SERVO
BLOCK DIAGRAM

REEL SERVO BLOCK DIAGRAM (FOR AU-505)



TO SERVO
LOAD/UNLOAD Ⓗ
P514
NORMAL Ⓛ
REEL 0
REEL 1
REEL 2
REEL 3
IC40
MODE SELECT
IC41
MODE SELECT
3 FWD Ⓗ
14 +SS Ⓗ
15 LOAD Ⓗ
1 REV Ⓗ
4 UNLOAD Ⓗ
1 FF Ⓗ
4 REW Ⓗ
6 BRAKE 1 Ⓗ
7 BRAKE 2 Ⓗ
TENSION SENSOR
P513
IC18
AMP
TS OFF SET
VR5
+5V
TAKE-UP REEL
FG+
FG-
P518
SUPPLY REEL
P516
TO SERVO IC5-17
TO SERVO IC5-15
Q53
ON/BRAKE 1
Q54
ON/BRAKE 2
Q55
Q56
Q57
FF/REW ON
Q72
Q71
ON/LL
ON/FF REW (EXCEPT LL)
Q33
D17,63,66
D29
ON/EXC LOAD.UNLOAD
Q34Ⓗ ON
ON/LOAD
Q35Ⓗ ON
ON/UNLOAD
Q36Ⓗ ON
Q64 Ⓗ ON
LOAD Ⓗ
UNLOAD Ⓗ
BRAKE 2 Ⓗ
BRAKE 1 Ⓗ
D65
D21,30
DC
TP17
IC32
DIFFERENTIAL
GAIN AMP 1
GAIN AMP 2
GAIN AMP 6
EXC. FF REW
UP/DOWN COUNTER
SPEED REF.
COMPARATOR
8bit COUNTER LATCH
BPM
GAIN AMP 3
GAIN AMP 5
GAIN AMP 4
GAIN AMP 7
FWD/REV
1 FWD
2 +SS
3 LOAD
4 REV
5 -SS
6 UNLOAD
7 FF
8 BRAKE
9 REW
T.REEL CURRENT
S.REEL CURRENT
FROM SERVO
CAP PULSE
FROM SERVO
4.43MHz
Q51
Q15,16
SWITCHING
Q17
BUFFER
Q47 ON/FF
Q48 ON/REW
Q62
Q61,D10
IC57
Q63
D76
D20
IC37
FF Ⓗ
NORMAL Ⓛ
Q3
REV Ⓗ
ERROR DC
IC42
AMP
Q52
IC43
AMP
S REEL
Q28
ERROR DC
REEL DIRECTION
AMP
IC17
L:0V
M:3V
H:5V
R220
Q41
R219
Q40
Q39
ON/REV
ON/FWD
C133
Q47
C134
Q48
ON/OFF
ON/REW
FF Ⓗ
REV Ⓗ
D28
C117
C120
C119
C121
C118
R180
Q19
Q22
ON/+,-SS, LOAD, UNLOAD BRAKE REW
R222
C142
C141
Q42
FWD TENSION
R190
R174
VR9
Q31
R191
Q32
ON/FWD
ON/FF REW
SMALL CASSETTE Ⓗ
S.REEL PULSE
T.REEL PULSE
S.REEL"ON"
T.REEL"ON"
LARGE LONG TAPE Ⓗ (90, 60mm)
P512
TORQUE UP Ⓗ
Q70
ON/TORQUE UP
Q13
ON/FF REW (EXCEPT LL)

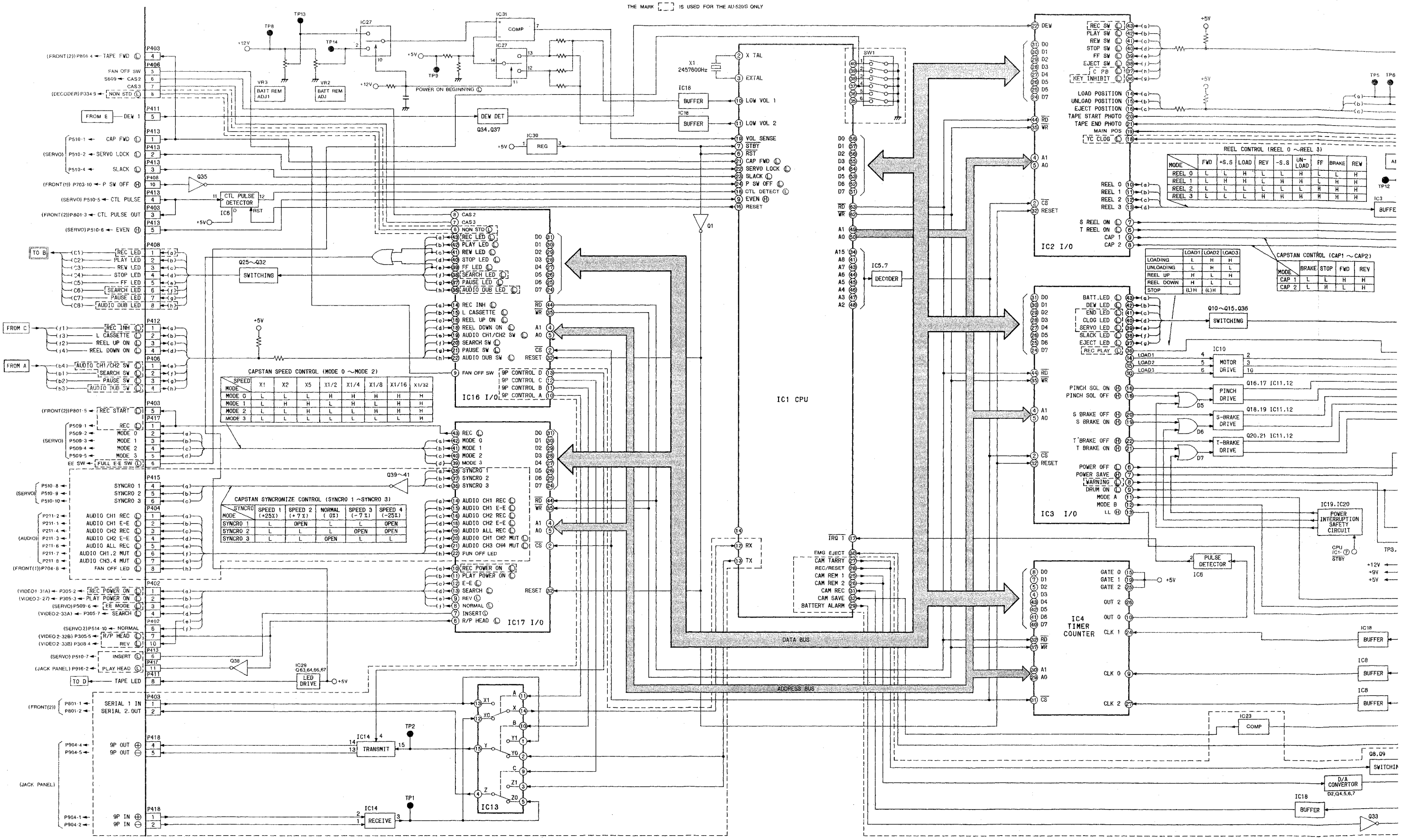
5)


Q72
ON/LL
Q71
ON/FF REW
(EXCEPT LL)
Q33
Q15,16
SWITCHING
FF SIGNAL
MOMENTARY Ⓗ
REW SIGNAL
MOMENTARY Ⓗ
Q17
BUFFER
+5V
SERVO
C5-15
Q54
ON/
BRAKE 2
Ⓗ ON
FF/REW
ON
ⒽON
Q55
Q56
ON/
BRAKE 1
ⒽON
Q57
ON/
BRAKE 2
Ⓗ ON
D17,63,66
D29
ON/EXC LOAD,UNLOAD
Q34ⒽON
ON/LOAD
Q35ⒽON
ON/UNLOAD
Q36ⒽON
Q64 Ⓗ ON
LOAD Ⓗ
UNLOAD Ⓗ
BRAKE 2 Ⓗ
BRAKE 1 Ⓗ
D65
Q47
ON/FF
Ⓗ ON
Q48
ON/REW
Ⓗ ON
Q62
Q61,D10
T.REEL CURRENT
IC57
DIFFERENTIAL
GAIN AMP 1
GAIN AMP 2
GAIN AMP 6
EXC.
FF REW
FF
REW
UP/DOWN COUNTER
SPEED REF.
COMPARATOR
8bit COUNTER LATCH
BPM
GAIN AMP 3
GAIN AMP 5
GAIN AMP 4
GAIN AMP 7
SPEED REF.
EXC.
FF REW
FF REW
FWD/REV
FWD/REV
✱
1 FWD
2 +SS
3 LOAD
4 REV
5 -SS
6 UNLOAD
7 FF
8 BRAKE
9 REW
IC32
D20
D76
Q63
Ⓗ ON
NORMAL Ⓛ
NORMAL Ⓛ
IC37
FF Ⓗ
REEL DIRECTION
Q3
Ⓗ ON
IC57
REW Ⓗ
ERROR DC
IC42
AMP
REV Ⓗ
Q52
Ⓗ ON
S.REEL CURRENT
R222
C142
C120
C119
C121
C118
R180
C117
C134
Q47
ⒽON
Q48
ⒽON
ON/REW
+5V
Q19
Ⓗ ON
ON/
+,-SS,
LOAD,
UNLOAD
BRAKE
REW
Q22
Ⓗ ON
Q42
Ⓗ ON
+5V
FWD TENSION
R190
R174
VR9
R191
Q31
Q32
ON/FWD
Ⓗ ON
ON/FF REW
Ⓗ ON
D28
C141
IC37
IC43
AMP
Q13
ON/FF REW
(EXCEPT LL)
S REEL CUR.
Q28
+5V
ERROR DC
DRIVE POWER
(FROM IC6-⑦)
R156
IC33
TORQUE CONTROL
DRIVER
FWD<1.0V
REV>1.8V
POSITION SIG.
GEN.& TORQUE
DIRECTION SW
LOGIC
AMP
1,3,23
5～10
REEL ON Ⓛ
P515
S-REEL
M1
M2
M3
MOTOR
H1+
H1-
H2+
H2-
H3+
H3-
HALL IC
DRIVE POWER
(FROM IC6-⑨)
REEL CUR
R164
IC34
TORQUE CONTROL
DRIVER
FWD<1.0V
REV>1.8V
POSITION SIG.
GEN.& TORQUE
DIRECTION SW
LOGIC
AMP
1,3,23
5～10
REEL ON Ⓛ
P517
T-REEL
M1
M2
M3
MOTOR
H1+
H1-
H2+
H2-
H3+
H3-
HALL IC

SYSTEM CONTROL BLOCK DIAGRAM

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

THE MARK [ ] IS USED FOR THE AU-520/S ONLY


IC1 CPU
IC2 I/O
IC3 I/O
IC4 TIMER COUNTER
IC16 I/O
IC17 I/O
IC13
IC14 TRANSMIT
IC14 RECEIVE
IC5,7 DECODER
IC18 BUFFER
IC31 COMP
IC27
IC30 REG
IC6 CTL PULSE DETECTOR
IC10 MOTOR DRIVE
IC19, IC20 POWER INTERRUPTION SAFETY CIRCUIT
IC23 COMP
IC29 Q63,64,66,67 LED DRIVE
Q25~Q32 SWITCHING
Q10~Q15, Q36 SWITCHING
Q34, Q37 DEW DET
Q16,17 IC11,12 PINCH DRIVE
Q18,19 IC11,12 S-BRAKE DRIVE
Q20,21 IC11,12 T-BRAKE DRIVE
PULSE DETECTOR
D/A CONVERTOR D2,Q4,5,6,7
Q8,Q9 SWITCHING
X1 2457600Hz
SW1
VR3 BATT REM ADJ1
VR2 BATT REM ADJ
POWER ON BEGINNING
DATA BUS
ADDRESS BUS
TP1
TP2
TP8
TP9
TP12
TP13
TP14
P403
P406
P411
P413
P408
P412
P415
P404
P402
P417
P418
TO B
FROM C
FROM A
FROM E
TO D

CAPSTAN SPEED CONTROL (MODE 0 ~MODE 2)

MODE \ SPEED	X1	X2	X5	X1/2	X1/4	X1/8	X1/16	X1/32
MODE 0	L	L	L	H	H	H	H	H
MODE 1	L	H	H	L	H	L	H	H
MODE 2	L	L	H	L	L	H	H	H
MODE 3	L	L	L	L	L	L	L	H

CAPSTAN SYNCRONIZE CONTROL (SYNCRO 1 ~SYNCRO 3)

MODE \ SYNCRO	SPEED 1 (+25%)	SPEED 2 (+7%)	NORMAL (0%)	SPEED 3 (-7%)	SPEED 4 (-25%)
SYNCRO 1	L	OPEN	L	L	OPEN
SYNCRO 2	L	L	L	OPEN	OPEN
SYNCRO 3	L	L	OPEN	L	L

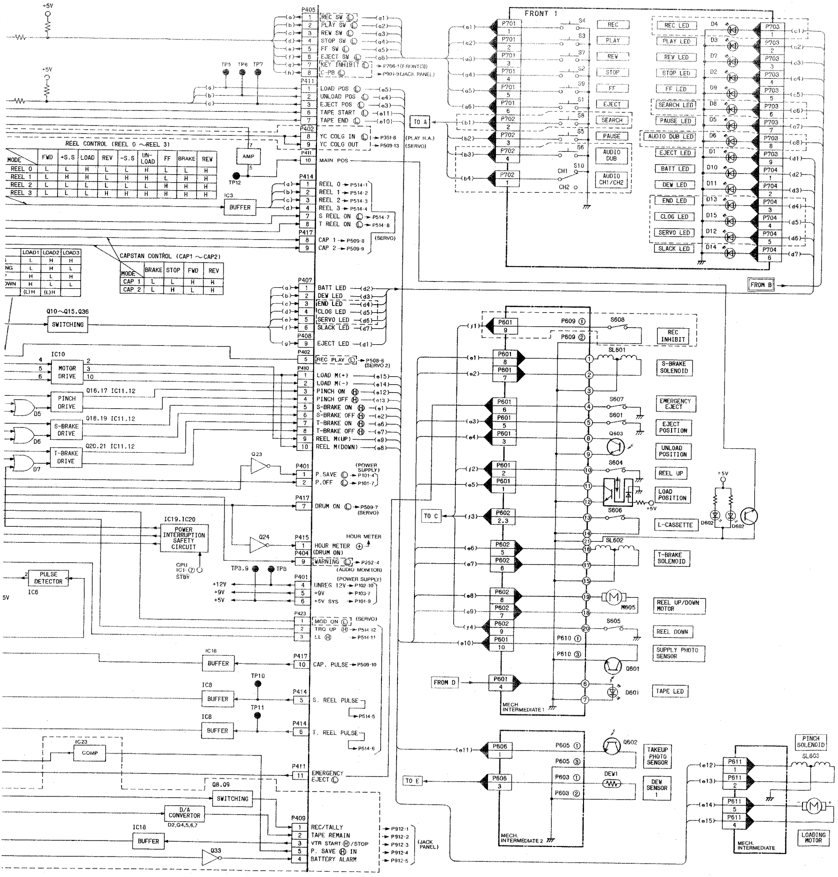
REEL CONTROL (REEL 0 ~REEL 3)

MODE	FWD	+S.S	LOAD	REV	-S.S	UN-LOAD	FF	BRAKE	REW
REEL 0	L	L	H	L	L	H	L	L	H
REEL 1	L	H	H	L	H	H	L	H	H
REEL 2	L	L	L	L	L	L	H	H	H
REEL 3	L	L	L	H	H	H	H	H	H

	LOAD1	LOAD2	LOAD3
LOADING	L	H	H
UNLOADING	L	H	L
REEL UP	H	L	H
REEL DOWN	H	L	L
STOP	(L)H	(L)H	

CAPSTAN CONTROL (CAP1 ~CAP2)

MODE	BRAKE	STOP	FWD	REV
CAP 1	L	L	H	H
CAP 2	L	H	L	H


+5V
P405
REC SW Ⓛ
PLAY SW Ⓛ
REW SW Ⓛ
STOP SW Ⓛ
FF SW Ⓛ
EJECT SW Ⓛ
KEY INHIBIT Ⓛ → P706-1(FRONT(3))
C-PB Ⓛ → P901-9(JACK PANEL)
TP5
TP6
TP7
P411
LOAD POS Ⓛ
UNLOAD POS Ⓛ
EJECT POS Ⓛ
TAPE START Ⓛ
TAPE END Ⓛ
TO A
P402
YC COLG IN Ⓛ → P351-8 (PLAY H.A.)
YC COLG OUT → P509-13 (SERVO)
AMP
TP12
MAIN POS
P414
IC3
BUFFER
REEL 0 → P514-1
REEL 1 → P514-2
REEL 2 → P514-3
REEL 3 → P514-4
S REEL ON Ⓛ → P514-7
T REEL ON Ⓛ → P514-8
P417
CAP 1 → P509-8
CAP 2 → P509-9
(SERVO)
FRONT 1
P701
P702
S4
S3
S7
S2
S9
S1
S8
S5
S6
CH1
S10
CH2
REC
PLAY
REW
STOP
FF
EJECT
SEARCH
PAUSE
AUDIO DUB
AUDIO CH1/CH2
REC LED
PLAY LED
REW LED
STOP LED
FF LED
SEARCH LED
PAUSE LED
AUDIO DUB LED
EJECT LED
BATT LED
DEW LED
END LED
CLOG LED
SERVO LED
SLACK LED
D4
D3
D7
D2
D9
D8
D5
D6
D1
D10
D11
D13
D15
D12
D14
P703
P704
FROM B
P407
BATT LED
DEW LED
END LED
CLOG LED
SERVO LED
SLACK LED
P408
EJECT LED
Q10~Q15.Q36
SWITCHING
P402
REC PLAY Ⓛ → P508-6 (SERVO 2)
P410
IC10
MOTOR DRIVE
LOAD M(+)
LOAD M(−)
PINCH ON Ⓗ
PINCH OFF Ⓗ
S-BRAKE ON Ⓗ
S-BRAKE OFF Ⓗ
T-BRAKE ON Ⓗ
T-BRAKE OFF Ⓗ
REEL M(UP)
REEL M(DOWN)
Q16.17 IC11.12
PINCH DRIVE
D5
Q18.19 IC11.12
S-BRAKE DRIVE
D6
Q20.21 IC11.12
T-BRAKE DRIVE
D7
Q23
P401
P.SAVE Ⓛ → P101-4
P.OFF Ⓛ → P101-7
(POWER SUPPLY)
DRUM ON Ⓛ → P509-7 (SERVO)
IC19.IC20
POWER INTERRUPTION SAFETY CIRCUIT
CPU IC1-⑦ STBY
Q24
P415
HOUR METER
HOUR METER Ⓗ
P404
(DRUM ON)
WARNING Ⓛ → P252-4 (AUDIO MONITOR)
TP3.9
TP8
PULSE DETECTOR
IC6
5V
+12V
+9V
+5V
UNREG 12V → P102-10
+9V → P103-7
+5V SYS → P101-9
(POWER SUPPLY)
P423
MOD ON Ⓛ (SERVO)
TRQ UP Ⓗ → P514-12
LL Ⓗ → P514-11
IC18
BUFFER
CAP. PULSE → P509-10
TP10
IC8
BUFFER
S. REEL PULSE → P514-5
TP11
IC8
BUFFER
T. REEL PULSE → P514-6
IC23
COMP
EMERGENCY EJECT Ⓛ
Q8.09
SWITCHING
D/A CONVERTOR
D2,Q4,5,6,7
IC18
BUFFER
Q33
P409
REC/TALLY → P912-1
TAPE REMAIN → P912-2
VTR START Ⓗ/STOP → P912-3
P. SAVE Ⓗ IN → P912-4
BATTERY ALARM → P912-5
(JACK PANEL)
P601
P609 ①
P609 ②
S608
REC INHIBIT
SL601
S-BRAKE SOLENOID
S607
EMERGENCY EJECT
S601
EJECT POSITION
Q603
UNLOAD POSITION
S604
REEL UP
LOAD POSITION
S606
L-CASSETTE
+5V
D602
Q602
P602
SL602
T-BRAKE SOLENOID
M605
REEL UP/DOWN MOTOR
S605
REEL DOWN
P610 ①
P610 ③
SUPPLY PHOTO SENSOR
Q601
D601
TAPE LED
TO C
FROM D
MECH. INTERMEDIATE 1
P606
P605 ①
P605 ③
Q602
TAKEUP PHOTO SENSOR
P603 ①
P603 ②
DEW1
DEW SENSOR 1
TO E
MECH. INTERMEDIATE 2
P611
PINCH SOLENOID
SL603
LOADING MOTOR
MECH. INTERMEDIATE

REEL CONTROL (REEL 0 ~REEL 3)

MODE	FWD	+S.S	LOAD	REV	-S.S	UN-LOAD	FF	BRAKE	REW
REEL 0	L	L	H	L	L	H	L	L	H
REEL 1	L	H	H	L	H	H	L	H	H
REEL 2	L	L	L	L	L	L	H	H	H
REEL 3	L	L	L	H	H	H	H	H	H

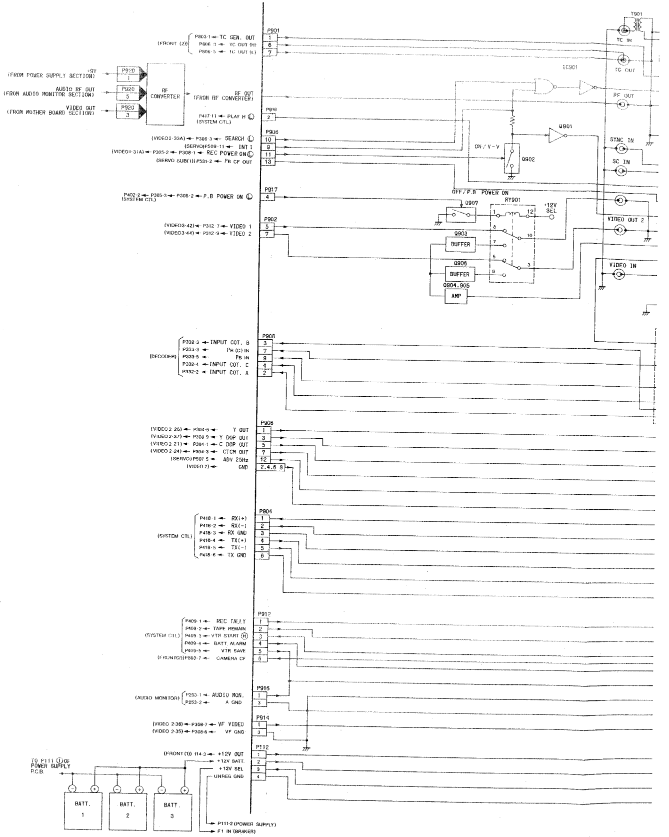
	LOAD1	LOAD2	LOAD3
G	L	H	H
NG	L	H	L
P	H	L	H
OWN	H	L	L
	(L) H	(L) H	

CAPSTAN CONTROL (CAP1 ~CAP2)

MODE	BRAKE	STOP	FWD	REV
CAP 1	L	L	H	H
CAP 2	L	H	L	H

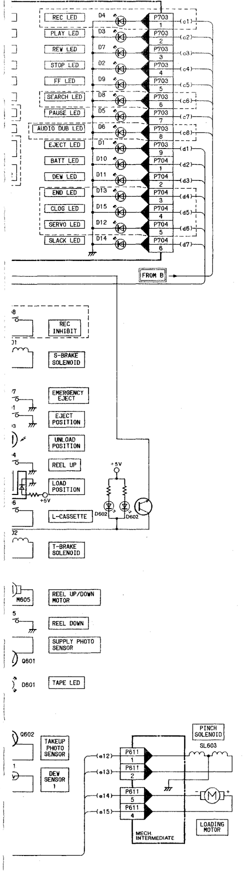
JACK PANEL BLOCK DIAGRAM (FOR AU-520/S ONLY)

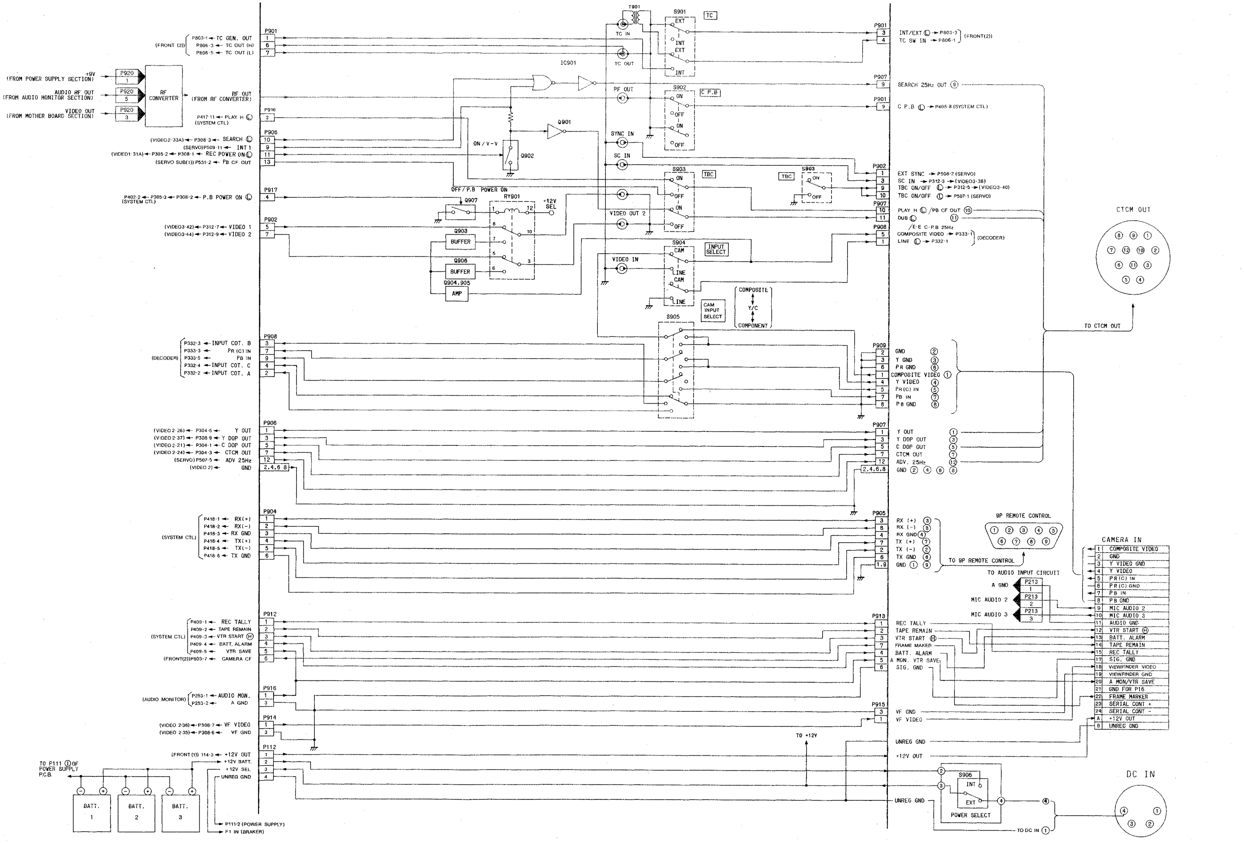
NOTE:
AU-52
AU-50


P901
(FRONT (2))
P803-1 ← TC GEN. OUT
P806-3 ← TC OUT (H)
P806-5 ← TC OUT (L)
+9V (FROM POWER SUPPLY SECTION)
AUDIO RF OUT (FROM AUDIO MONITOR SECTION)
VIDEO OUT (FROM MOTHER BOARD SECTION)
P920
RF CONVERTER
RF OUT (FROM RF CONVERTER)
P916
P417-11 ← PLAY H Ⓛ (SYSTEM CTL)
P906
(VIDEO2-33A) ← P308-3 ← SEARCH Ⓛ
(SERVO)P509-11 ← INT 1
(VIDEO1-31A) ← P305-2 ← P308-1 ← REC POWER ON Ⓛ
(SERVO SUB(1)) P531-2 ← PB CF OUT
P917
P402-2 ← P305-3 ← P308-2 ← P.B POWER ON Ⓛ (SYSTEM CTL)
P902
(VIDEO3-42) ← P312-7 ← VIDEO 1
(VIDEO3-44) ← P312-9 ← VIDEO 2
P908
(DECODER)
P332-3 ← INPUT COT. B
P333-3 ← PR (C) IN
P333-5 ← PB IN
P332-4 ← INPUT COT. C
P332-2 ← INPUT COT. A
P906
(VIDEO 2-26) ← P304-5 ← Y OUT
(VIDEO 2-37) ← P308-9 ← Y DOP OUT
(VIDEO 2-21) ← P304-1 ← C DOP OUT
(VIDEO 2-24) ← P304-3 ← CTCM OUT
(SERVO) P507-5 ← ADV 25Hz
(VIDEO 2) ← GND
2,4,6 8
P904
(SYSTEM CTL)
P418-1 ← RX(+)
P418-2 ← RX(−)
P418-3 ← RX GND
P418-4 ← TX(+)
P418-5 ← TX(−)
P418-6 ← TX GND
P912
(SYSTEM CTL)
P409-1 ← REC TALLY
P409-2 ← TAPE REMAIN
P409-3 ← VTR START Ⓗ
P409-4 ← BATT. ALARM
P409-5 ← VTR SAVE
(FRONT(2))P803-7 ← CAMERA CF
P916
(AUDIO MONITOR)
P253-1 ← AUDIO MON.
P253-2 ← A GND
P914
(VIDEO 2-36) ← P308-7 ← VF VIDEO
(VIDEO 2-35) ← P308-6 ← VF GND
P112
(FRONT (1)) 114-3 ← +12V OUT
+12V BATT.
+12V SEL
UNREG GND
TO P111 ① OF POWER SUPPLY P.C.B.
BATT. 1
BATT. 2
BATT. 3
P111-2 (POWER SUPPLY)
F1 IN (BRAKER)
T901
TC IN
TC OUT
IC901
RF OUT
Q901
ON / V-V
Q902
SYNC IN
SC IN
OFF / P.B POWER ON
Q907
RY901
+12V SEL
Q903
BUFFER
Q906
BUFFER
Q904.905
AMP
VIDEO OUT 2
VIDEO IN

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

JACK PANEL BLOCK DIAGRAM (FOR AU-520/S ONLY)


REC LED
PLAY LED
REW LED
STOP LED
FF LED
SEARCH LED
PAUSE LED
AUDIO DUB LED
EJECT LED
BATT LED
DEW LED
END LED
CLOG LED
SERVO LED
SLACK LED
P703
P704
FROM B
REC INHIBIT
S-BRAKE SOLENOID
EMERGENCY EJECT
EJECT POSITION
UNLOAD POSITION
REEL UP
LOAD POSITION
L-CASSETTE
T-BRAKE SOLENOID
REEL UP/DOWN MOTOR
M605
REEL DOWN
SUPPLY PHOTO SENSOR
Q601
D601
TAPE LED
Q602
TAKEUP PHOTO SENSOR
DEW SENSOR 1
P611
PINCH SOLENOID
SL603
LOADING MOTOR
MECH INTERMEDIATE
+5V
D602

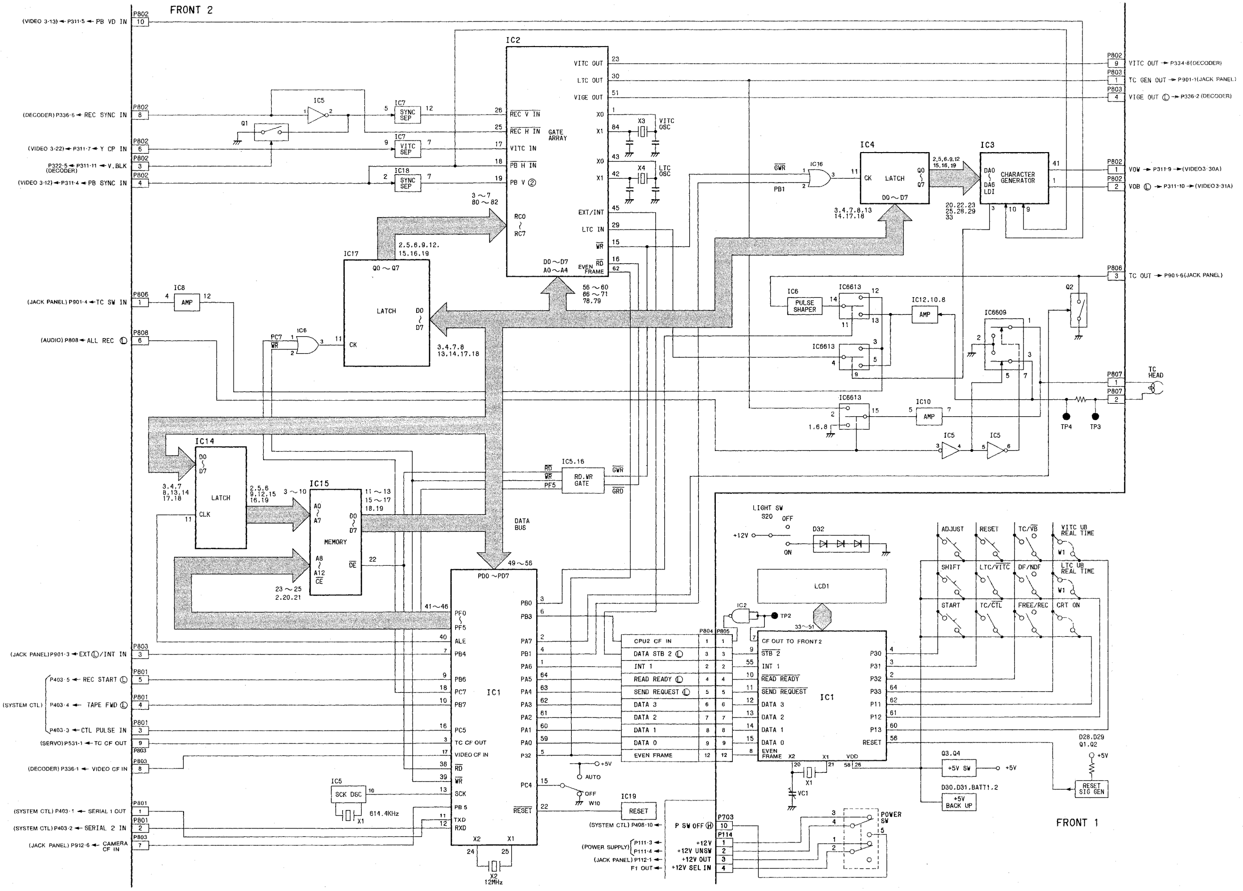

P901
P903-1 TC GEN. OUT
P806-3 TC OUT (H)
P806-5 TC OUT (L)
(FRONT (2))
(FROM POWER SUPPLY SECTION) +9V
(FROM AUDIO MONITOR SECTION) AUDIO RF OUT
(FROM MOTHER BOARD SECTION) VIDEO OUT
P920
RF CONVERTER
RF OUT (FROM RF CONVERTER)
P916
P417-11 PLAY H (SYSTEM CTL)
P906
SEARCH
INT 1
REC POWER ON
PB CF OUT
P917
P.B POWER ON
P902
VIDEO 1
VIDEO 2
T901
S901
TC IN
TC OUT
TC
EXT
INT
IC901
Q901
Q902
ON / V-V
RF OUT
S902
C.P.B
ON
OFF
SYNC IN
SC IN
S903
TBC
OFF / P.B POWER ON
Q907
RY901
+12V SEL
Q903
BUFFER
Q906
Q904,905
AMP
VIDEO OUT 2
S904
CAM
LINE
INPUT SELECT
VIDEO IN
CAM INPUT SELECT
COMPOSITE
Y/C
COMPONENT
S905
P908
(DECODER)
INPUT COT. B
PR (C) IN
PB IN
INPUT COT. C
INPUT COT. A
P906
Y OUT
Y DOP OUT
C DOP OUT
CTCM OUT
ADV 25Hz
GND
P904
(SYSTEM CTL)
RX(+)
RX(−)
RX GND
TX(+)
TX(−)
TX GND
P912
REC TALLY
TAPE REMAIN
VTR START
BATT. ALARM
VTR SAVE
CAMERA CF
P916
(AUDIO MONITOR)
AUDIO MON.
A GND
P914
VF VIDEO
VF GND
P112
TO P111 ① OF POWER SUPPLY P.C.B.
+12V OUT
+12V BATT.
+12V SEL
UNREG GND
BATT. 1
BATT. 2
BATT. 3
P111-2 (POWER SUPPLY)
F1 IN (BRAKER)
TO +12V
P901
INT/EXT P803-3 (FRONT(2))
TC SW IN P806-1
P907
SEARCH 25Hz OUT ⑨
C.P.B P405-8 (SYSTEM CTL)
P902
EXT SYNC P508-2 (SERVO)
SC IN P312-3 (VIDEO3-38)
TBC ON/OFF P312-5 (VIDEO3-40)
TBC ON/OFF P507-1 (SERVO)
PLAY H /PB CF OUT ⑩
DUB ⑪
/E-E C.P.B 25Hz
COMPOSITE VIDEO P333-1 (DECODER)
LINE P332-1
P908
CTCM OUT
TO CTCM OUT
P909
GND ②
Y GND ③
PR GND ⑥
COMPOSITE VIDEO ①
Y VIDEO ④
PR (C) IN ⑤
PB IN ⑦
PB GND ⑧
P907
Y OUT ①
Y DOP OUT ③
C DOP OUT ⑤
CTCM OUT ⑦
ADV. 25Hz ⑫
GND ② ④ ⑥ ⑧
P905
RX (+) ③
RX (−) ⑧
RX GND ④
TX (+) ⑦
TX (−) ②
TX GND ⑥
GND ① ⑨
9P REMOTE CONTROL
TO 9P REMOTE CONTROL
TO AUDIO INPUT CIRCUIT
A GND
MIC AUDIO 2
MIC AUDIO 3
P213
CAMERA IN
COMPOSITE VIDEO
GND
Y VIDEO GND
Y VIDEO
PR (C) IN
PR (C) GND
PB IN
PB GND
MIC AUDIO 2
MIC AUDIO 3
AUDIO GND
VTR START
BATT. ALARM
TAPE REMAIN
REC TALLY
SIG. GND
VIEWFINDER VIDEO
VIEWFINDER GND
A MON/VTR SAVE
GND FOR P16
FRAME MARKER
SERIAL CONT +
SERIAL CONT −
+12V OUT
UNREG GND
P913
REC TALLY
TAPE REMAIN
VTR START
FRAME MAKER
BATT. ALARM
A MON. VTR SAVE
SIG. GND
P915
VF GND
VF VIDEO
UNREG GND
+12V OUT
S906
INT
EXT
POWER SELECT
TO DC IN ①
DC IN

REVERSE SIDE

**FRONT 1, 2
BLOCK DIAGRAM**

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

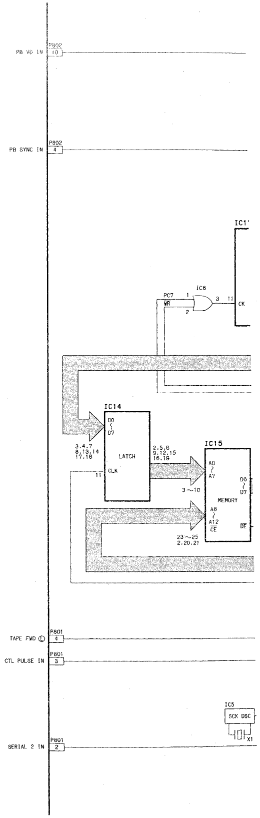
FRONT 1, 2 BLOCK DIAGRAM (FOR AU-520/S)



FRONT 2
FRONT 1
(VIDEO 3-13) P311-5 PB VD IN
(DECODER) P336-5 REC SYNC IN
(VIDEO 3-22) P311-7 Y CP IN
P322-5 P311-11 V.BLK (DECODER)
(VIDEO 3-12) P311-4 PB SYNC IN
(JACK PANEL) P901-4 TC SW IN
(AUDIO) P808 ALL REC
(JACK PANEL) P901-3 EXT/INT IN
P403-5 REC START
(SYSTEM CTL) P403-4 TAPE FWD
P403-3 CTL PULSE IN
(SERVO) P531-1 TC CF OUT
(DECODER) P336-1 VIDEO CF IN
(SYSTEM CTL) P403-1 SERIAL 1 OUT
(SYSTEM CTL) P403-2 SERIAL 2 IN
(JACK PANEL) P912-6 CAMERA CF IN
IC2
GATE ARRAY
VITC OUT
LTC OUT
VIGE OUT
REC V IN
REC H IN
VITC IN
PB H IN
PB V
EXT/INT
LTC IN
EVEN FRAME
X3 VITC OSC
X4 LTC OSC
IC5
IC7 SYNC SEP
IC18 SYNC SEP
Q1
IC17 LATCH
IC8 AMP
IC6
IC14 LATCH
IC15 MEMORY
DATA BUS
IC5.16 RD.WR GATE
IC1
X2 12MHz
IC5 SCK OSC X1 614.4KHz
IC4 LATCH
IC3 CHARACTER GENERATOR
IC16
VITC OUT P334-8 (DECODER)
TC GEN OUT P901-1 (JACK PANEL)
VIGE OUT P336-2 (DECODER)
VOW P311-9 (VIDEO3-30A)
VOB P311-10 (VIDEO3-31A)
TC OUT P901-6 (JACK PANEL)
IC6 PULSE SHAPER
IC6613
IC12,10,8 AMP
IC6609
Q2
TC HEAD
IC10 AMP
TP4
TP3
LIGHT SW S20
D32
LCD1
TP2
CPU2 CF IN
DATA STB 2
INT 1
READ READY
SEND REQUEST
DATA 3
DATA 2
DATA 1
DATA 0
EVEN FRAME
CF OUT TO FRONT2
W10 AUTO OFF
IC19 RESET
(SYSTEM CTL) P408-10 P SW OFF
(POWER SUPPLY) P111-3 +12V
P111-4 +12V UNSW
(JACK PANEL) P112-1 +12V OUT
F1 OUT +12V SEL IN
POWER SW
Q3.Q4 +5V SW
D30.D31.BATT1.2 +5V BACK UP
D28.D29 Q1.Q2 RESET SIG GEN
ADJUST
RESET
TC/VB
VITC UB REAL TIME
SHIFT
LTC/VITC
DF/NDF
LTC UB REAL TIME
START
TC/CTL
FREE/REC
CRT ON

4—16

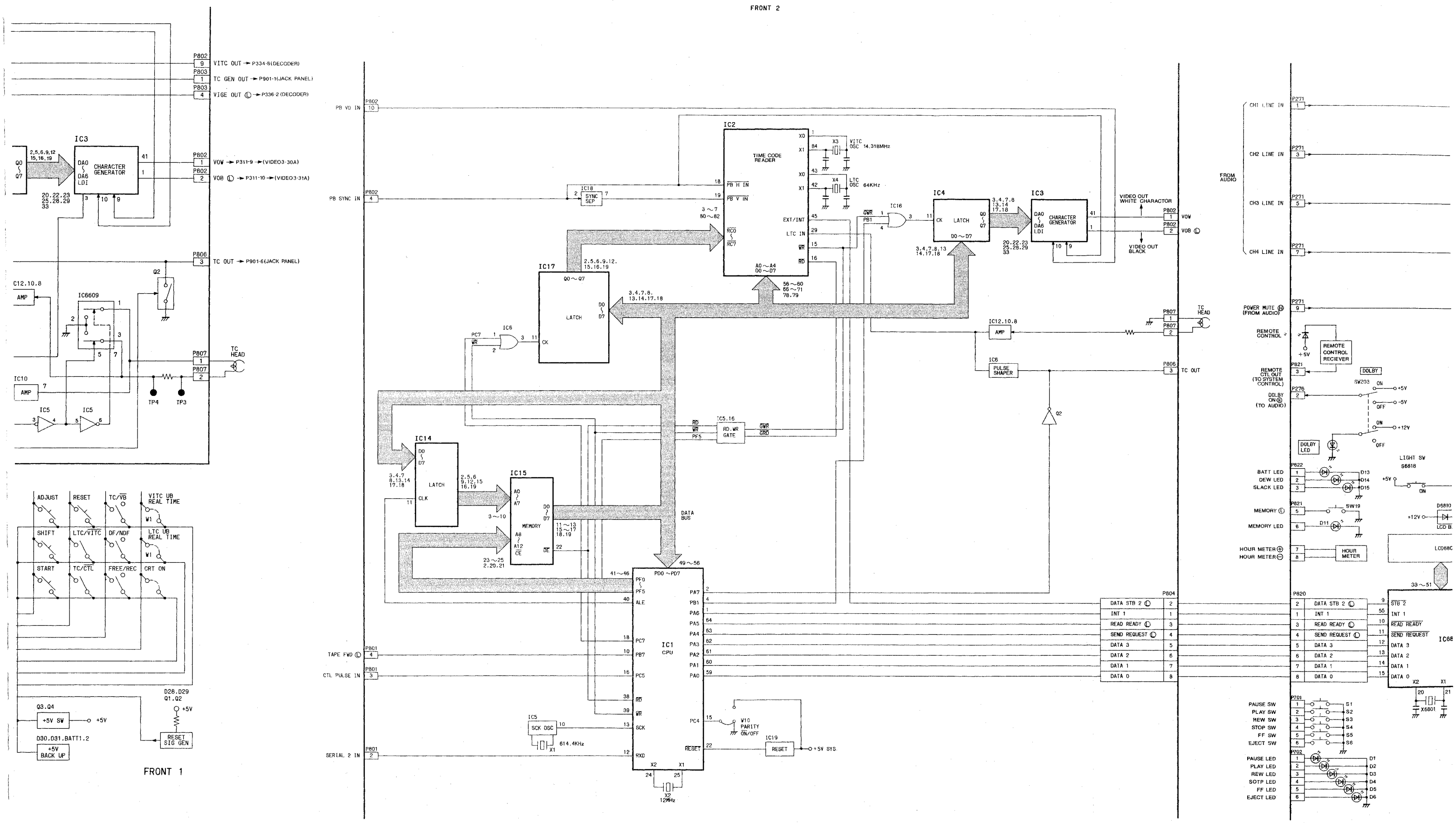
FRONT 1, 2 BLOCK DIA



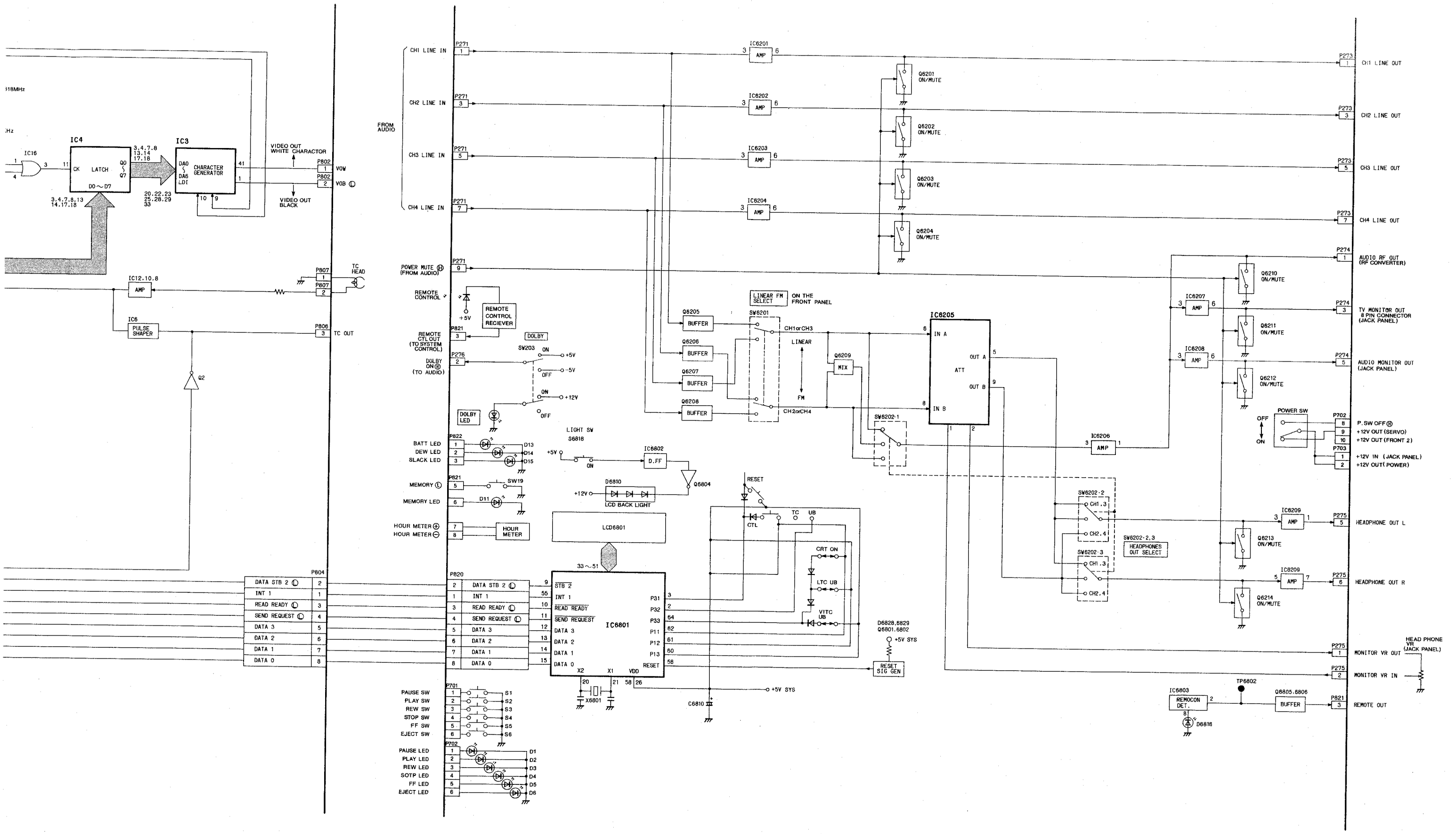
PB VD IN
PB SYNC IN
IC14 LATCH
IC15 MEMORY
TAPE FWD
CTL PULSE IN
SERIAL 2 IN
IC5 SCK OSC

SED FOR AU-520S & AU-520
SED FOR AU-505 ONLY

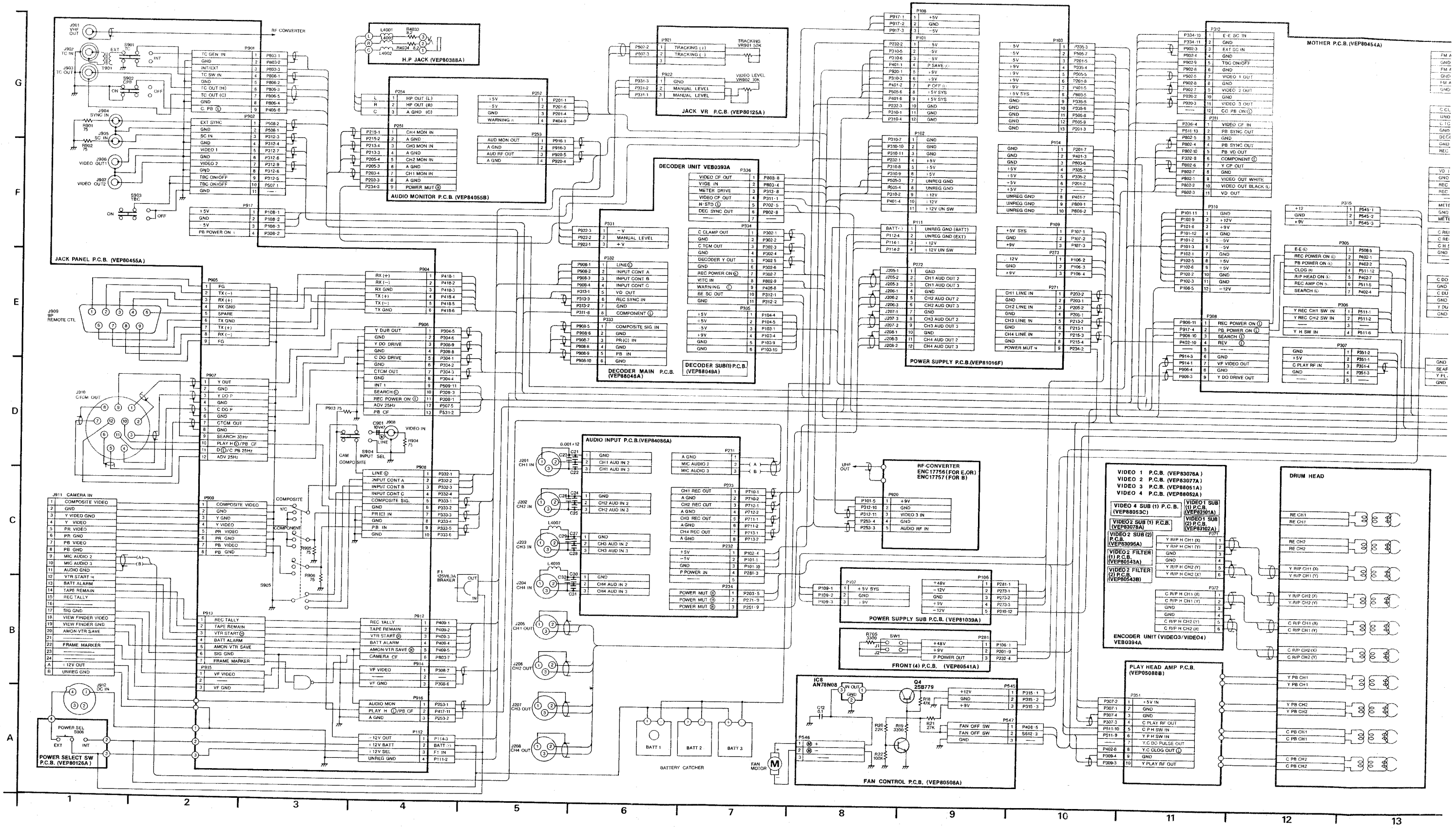
FRONT 1, 2 BLOCK DIAGRAM (FOR AU-505)

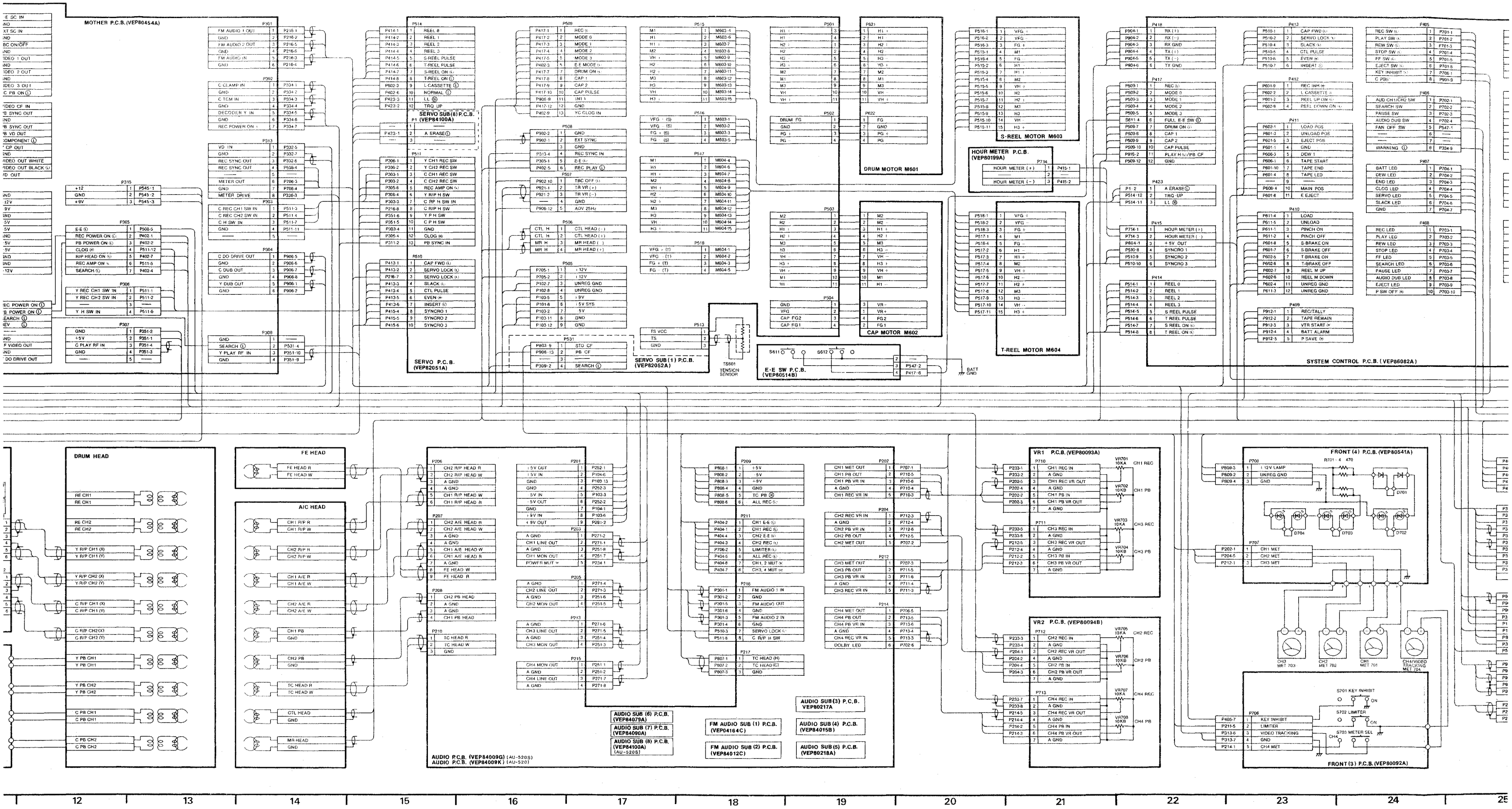


FRONT 2
FRONT 1
P802 9 VITC OUT → P334-8(DECODER)
P803 1 TC GEN OUT → P901-1(JACK PANEL)
P803 4 VIGE OUT Ⓛ → P336-2 (DECODER)
IC3 CHARACTER GENERATOR
P802 1 VOW → P311-9 → (VIDEO3-30A)
P802 2 VOB Ⓛ → P311-10 → (VIDEO3-31A)
P806 3 TC OUT → P901-6(JACK PANEL)
IC12.10.8 AMP
IC6609
Q2
P807 TC HEAD
IC10 AMP
IC5
TP4
TP3
ADJUST
RESET
TC/VB
VITC UB REAL TIME
SHIFT
LTC/VITC
DF/NDF
LTC UB REAL TIME
START
TC/CTL
FREE/REC
CRT ON
Q3.Q4 +5V SW
+5V
D28.D29 Q1.Q2
RESET SIG GEN
D30.D31.BATT1.2
+5V BACK UP
PB VD IN P802 10
PB SYNC IN P802 4
IC18 SYNC SEP
IC2 TIME CODE READER
PB H IN
PB V IN
RC0 ~ RC7
EXT/INT
LTC IN
WR
RD
A0 ~ A4
D0 ~ D7
X3 VITC OSC 14.318MHz
X4 LTC OSC 64KHz
IC16
IC4 LATCH
IC3 CHARACTER GENERATOR
VIDEO OUT WHITE CHARACTOR
VIDEO OUT BLACK
P802 1 VOW
P802 2 VOB Ⓛ
IC17 LATCH
IC6
PC7
IC12.10.8 AMP
IC6 PULSE SHAPER
P806 3 TC OUT
Q2
IC5.16 RD.WR GATE
GWR
GRD
PF5
IC14 LATCH
IC15 MEMORY
DATA BUS
IC1 CPU
PD0 ~ PD7
ALE
PC7
PB7
PC5
RD
WR
SCK
RXD
RESET
PC4
W10 PARITY ON/OFF
IC19 RESET
+5V SYS
IC5 SCK OSC
614.4KHz
X1
X2 12MHz
TAPE FWD Ⓛ P801 4
CTL PULSE IN P801 3
SERIAL 2 IN P801 2
P804
DATA STB 2 Ⓛ
INT 1
READ READY Ⓛ
SEND REQUEST Ⓛ
DATA 3
DATA 2
DATA 1
DATA 0
CH1 LINE IN
CH2 LINE IN
CH3 LINE IN
CH4 LINE IN
FROM AUDIO
P271
POWER MUTE ⊕ (FROM AUDIO)
REMOTE CONTROL
REMOTE CONTROL RECIEVER
REMOTE CTL OUT (TO SYSTEM CONTROL)
DOLBY ON ⊕ (TO AUDIO)
DOLBY
SW203
DOLBY LED
LIGHT SW S6818
P822
BATT LED
DEW LED
SLACK LED
D13
D14
D15
P821
MEMORY Ⓛ
MEMORY LED
SW19
D11
HOUR METER ⊕
HOUR METER ⊖
HOUR METER
D6810
LCD B
LCD68
P820
STB 2
INT 1
READ READY
SEND REQUEST
DATA 3
DATA 2
DATA 1
DATA 0
IC68
X6801
P701
PAUSE SW
PLAY SW
REW SW
STOP SW
FF SW
EJECT SW
S1
S2
S3
S4
S5
S6
P702
PAUSE LED
PLAY LED
REW LED
SOTP LED
FF LED
EJECT LED
D1
D2
D3
D4
D5
D6


318MHz
Hz
IC16
IC4
LATCH
CK
Q0 ~ Q7
D0 ~ D7
3.4.7.8 13.14 17.18
3.4.7.8.13 14.17.18
IC3
DA0 ~ DA6 LDI
CHARACTER GENERATOR
20.22.23 25.28.29 33
VIDEO OUT WHITE CHARACTOR
VIDEO OUT BLACK
P802
VOW
VOB Ⓛ
IC12.10.8
AMP
P807
TC HEAD
IC6
PULSE SHAPER
P806
TC OUT
Q2
P804
DATA STB 2 Ⓛ
INT 1
READ READY Ⓛ
SEND REQUEST Ⓛ
DATA 3
DATA 2
DATA 1
DATA 0
FROM AUDIO
CH1 LINE IN
CH2 LINE IN
CH3 LINE IN
CH4 LINE IN
P271
POWER MUTE Ⓗ (FROM AUDIO)
REMOTE CONTROL
+5V
REMOTE CONTROL RECIEVER
P821
REMOTE CTL OUT (TO SYSTEM CONTROL)
P276
DOLBY ON Ⓗ (TO AUDIO)
DOLBY
SW203
ON
OFF
+5V
-5V
+12V
DOLBY LED
P822
BATT LED
DEW LED
SLACK LED
D13
D14
D15
MEMORY Ⓛ
SW19
MEMORY LED
D11
HOUR METER ⊕
HOUR METER ⊖
HOUR METER
LIGHT SW
S6818
IC6802
D.FF
Q6804
D6810
LCD BACK LIGHT
LCD6801
33 ~ 51
P820
IC6801
STB 2
READ READY
SEND REQUEST
P31
P32
P33
P11
P12
P13
RESET
X2
X1
VDD
X6801
P701
PAUSE SW
PLAY SW
REW SW
STOP SW
FF SW
EJECT SW
S1
S2
S3
S4
S5
S6
P702
PAUSE LED
PLAY LED
REW LED
SOTP LED
FF LED
EJECT LED
D1
D2
D3
D4
D5
D6
IC6201
IC6202
IC6203
IC6204
AMP
Q6201 ON/MUTE
Q6202 ON/MUTE
Q6203 ON/MUTE
Q6204 ON/MUTE
LINEAR FM SELECT
ON THE FRONT PANEL
Q6205
Q6206
Q6207
Q6208
BUFFER
SW6201
CH1orCH3
CH2orCH4
LINEAR
FM
Q6209
MIX
IC6205
IN A
IN B
OUT A
OUT B
ATT
SW6202-1
IC6206
RESET
CTL
TC
UB
CRT ON
LTC UB
VITC UB
D6828.6829 Q6801.6802
+5V SYS
RESET SIG GEN
C6810
SW6202-2
SW6202-3
CH1.3
CH2.4
SW6202-2,3
HEADPHONES OUT SELECT
IC6207
IC6208
IC6209
Q6210 ON/MUTE
Q6211 ON/MUTE
Q6212 ON/MUTE
Q6213 ON/MUTE
Q6214 ON/MUTE
POWER SW
OFF
ON
P273
CH1 LINE OUT
CH2 LINE OUT
CH3 LINE OUT
CH4 LINE OUT
P274
AUDIO RF OUT (RF CONVERTER)
TV MONITOR OUT 8 PIN CONNECTOR (JACK PANEL)
AUDIO MONITOR OUT (JACK PANEL)
P702
P.SW OFF Ⓗ
+12V OUT (SERVO)
+12V OUT (FRONT 2)
P703
+12V IN (JACK PANEL)
+12V OUT (POWER)
P275
HEADPHONE OUT L
HEADPHONE OUT R
MONITOR VR OUT
MONITOR VR IN
HEAD PHONE VR (JACK PANEL)
TP6802
IC6803
REMOCON DET.
D6816
Q6805.6806
BUFFER
REMOTE OUT

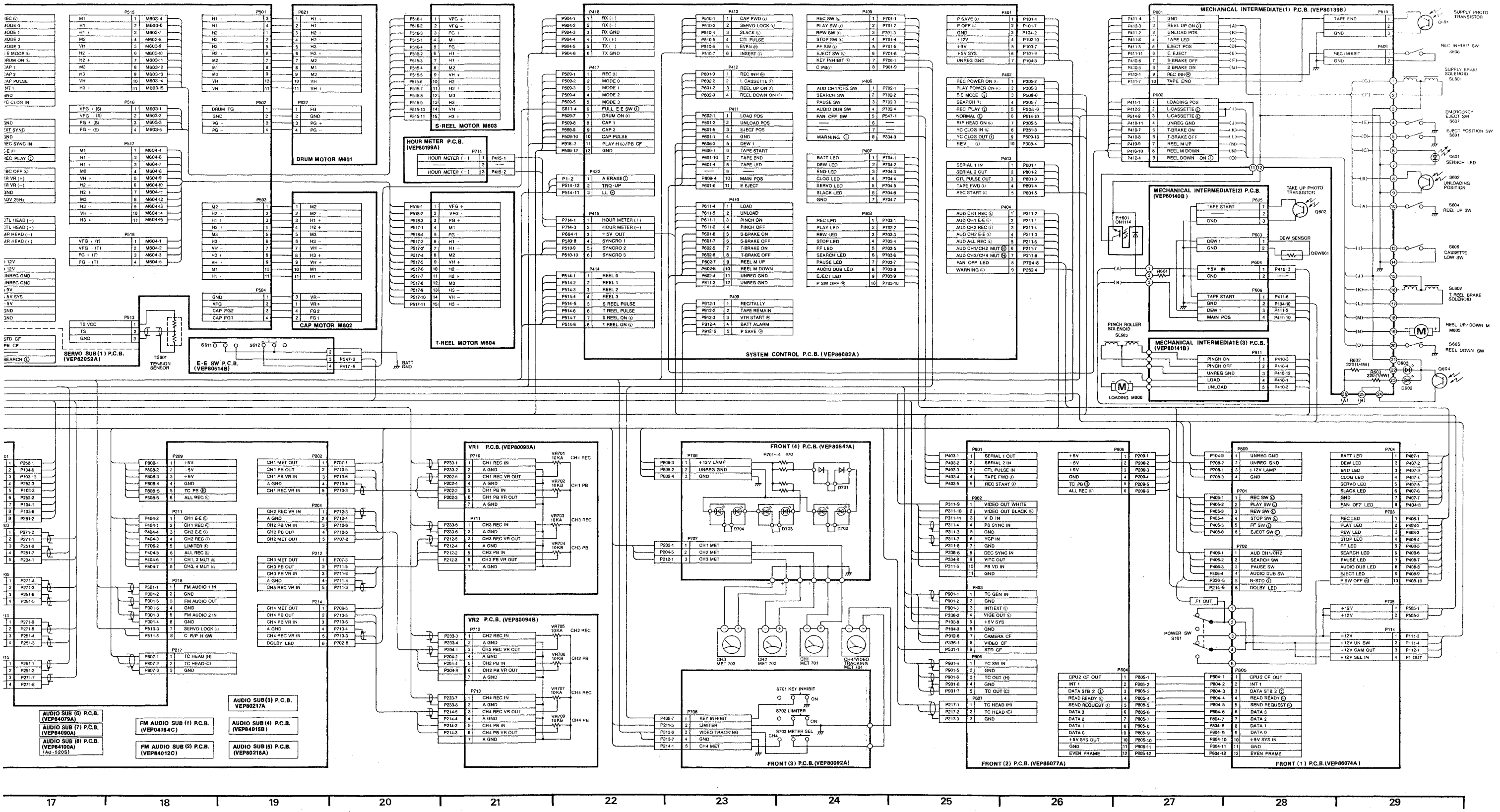
INTERCONNECTION SCHEMATIC DIAGRAM (FOR AU-520/S)


JACK PANEL P.C.B. (VEP80455A)
H.P JACK (VEP80388A)
AUDIO MONITOR P.C.B. (VEP84055B)
JACK VR P.C.B. (VEP80125A)
DECODER UNIT VEB0393A
DECODER MAIN P.C.B. (VEP88048A)
DECODER SUB(1) P.C.B. (VEP88049A)
POWER SUPPLY P.C.B.(VEP81016F)
MOTHER P.C.B. (VEP80454A)
AUDIO INPUT P.C.B.(VEP84086A)
RF-CONVERTER ENC17756(FOR E,OR) ENC17757(FOR B)
POWER SUPPLY SUB P.C.B. (VEP81039A)
FRONT(4) P.C.B. (VEP80541A)
FAN CONTROL P.C.B. (VEP80508A)
VIDEO 1 P.C.B. (VEP83076A)
VIDEO 2 P.C.B. (VEP83077A)
VIDEO 3 P.C.B. (VEP88051A)
VIDEO 4 P.C.B. (VEP88052A)
ENCODER UNIT (VIDEO3/VIDEO4) VEB0394A
PLAY HEAD AMP P.C.B. (VEP05088B)
DRUM HEAD
POWER SELECT SW P.C.B. (VEP80126A)
BATTERY CATCHER
BATT 1
BATT 2
BATT 3
FAN MOTOR
J909 9P REMOTE CTL
J910 CTCM OUT
J911 CAMERA IN
J912 DC IN
RF CONVERTER
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13


MOTHER P.C.B. (VEP80454A)
SERVO SUB (8) P.C.B. (VEP84100A)
SERVO P.C.B. (VEP82051A)
SERVO SUB (1) P.C.B. (VEP82052A)
TS601 TENSION SENSOR
E-E SW P.C.B. (VEP80514B)
S611
S612
BATT GND
DRUM MOTOR M601
CAP MOTOR M602
S-REEL MOTOR M603
T-REEL MOTOR M604
HOUR METER P.C.B. (VEP80199A)
SYSTEM CONTROL P.C.B. (VEP86082A)
DRUM HEAD
FE HEAD
A/C HEAD
AUDIO P.C.B. (VEP84009G) (AU-520S)
AUDIO P.C.B. (VEP84009K) (AU-520)
AUDIO SUB (6) P.C.B. (VEP84079A)
AUDIO SUB (7) P.C.B. (VEP84090A)
AUDIO SUB (8) P.C.B. (VEP84100A) (AU-520S)
FM AUDIO SUB (1) P.C.B. (VEP04164C)
FM AUDIO SUB (2) P.C.B. (VEP84012C)
AUDIO SUB (3) P.C.B. (VEP80217A)
AUDIO SUB (4) P.C.B. (VEP84015B)
AUDIO SUB (5) P.C.B. (VEP80218A)
VR1 P.C.B. (VEP80093A)
VR2 P.C.B. (VEP80094B)
FRONT (4) P.C.B. (VEP80541A)
FRONT (3) P.C.B. (VEP80092A)
CH3 MET 703
CH2 MET 702
CH1 MET 701
CH4/VIDEO TRACKING MET 704
S701 KEY INHIBIT
S702 LIMITER
S703 METER SEL
12
13
14
15
16
17
18
19
20
21
22
23
24
25

INTERCONNECTION SCHEMATIC DIAGRAM

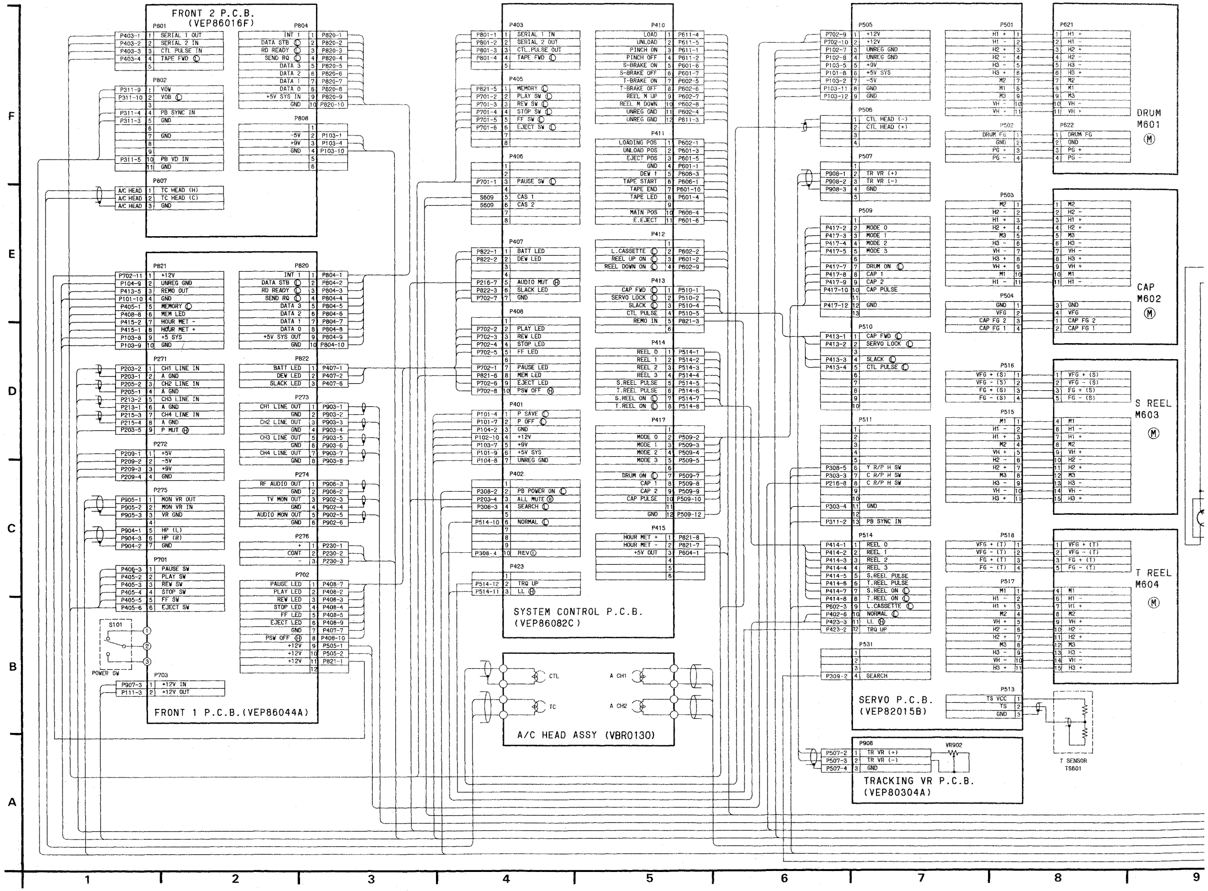
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-520 S = USED FOR AU-520S ONLY
AU-520 = USED FOR AU-520 ONLY
AU-505 = USED FOR AU-505 ONLY

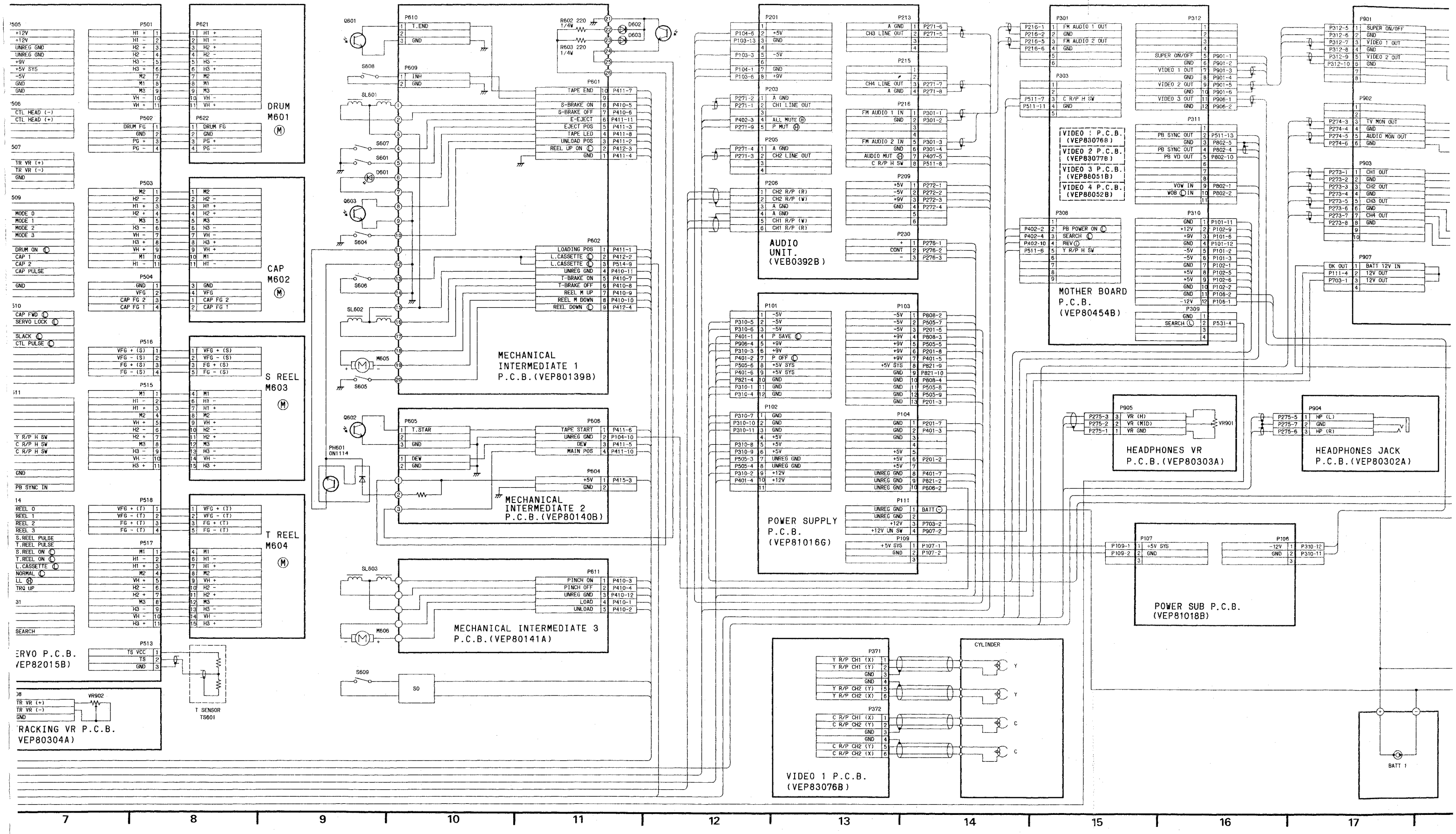

DRUM MOTOR M601
S-REEL MOTOR M603
HOUR METER P.C.B. (VEP80199A)
CAP MOTOR M602
T-REEL MOTOR M604
SERVO SUB (1) P.C.B. (VEP82052A)
TS601 TENSION SENSOR
E-E SW P.C.B. (VEP80514B)
SYSTEM CONTROL P.C.B. (VEP86082A)
MECHANICAL INTERMEDIATE(1) P.C.B. (VEP80139B)
MECHANICAL INTERMEDIATE(2) P.C.B. (VEP80140B)
MECHANICAL INTERMEDIATE(3) P.C.B. (VEP80141B)
LOADING M606
AUDIO SUB (6) P.C.B. (VEP84079A)
AUDIO SUB (7) P.C.B. (VEP84090A)
AUDIO SUB (8) P.C.B. (VEP84100A) (AU-520S)
FM AUDIO SUB (1) P.C.B. (VEP04184C)
FM AUDIO SUB (2) P.C.B. (VEP84012C)
AUDIO SUB (3) P.C.B. VEP80217A
AUDIO SUB (4) P.C.B. (VEP84015B)
AUDIO SUB (5) P.C.B. (VEP80218A)
VR1 P.C.B. (VEP80093A)
VR2 P.C.B. (VEP80094B)
FRONT (4) P.C.B. (VEP80541A)
FRONT (3) P.C.B. (VEP80092A)
FRONT (2) P.C.B. (VEP86077A)
FRONT (1) P.C.B. (VEP86074A)
POWER SW S101
17
18
19
20
21
22
23
24
25
26
27
28
29

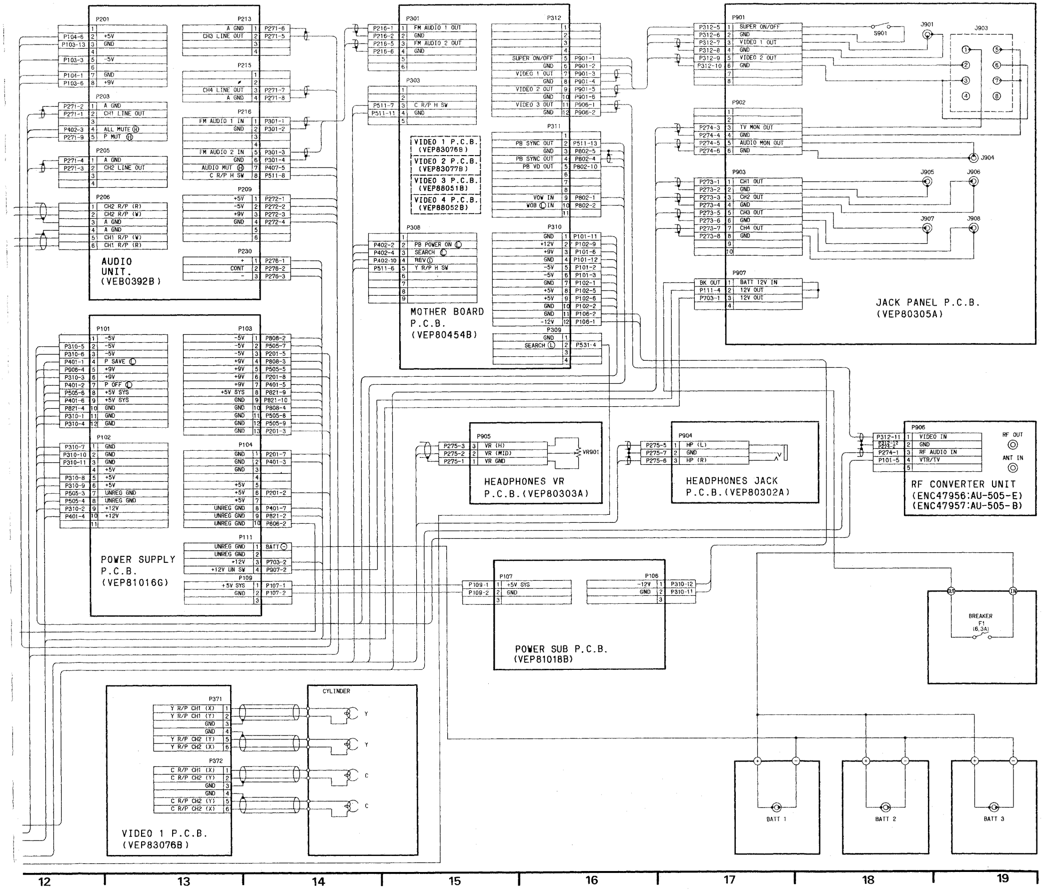
REVERSE SIDE

INTERCONNECTION SCHEMATIC DIAGRAM

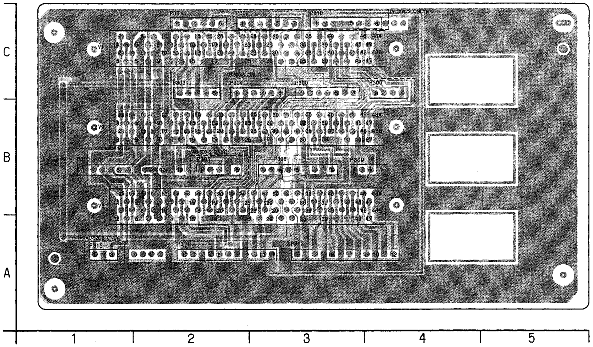
INTERCONNECTION SCHEMATIC DIAGRAM (FOR AU-505)


FRONT 2 P.C.B. (VEP86016F)
P801
P802
P807
P804
P808
FRONT 1 P.C.B. (VEP86044A)
P821
P820
P271
P822
P272
P273
P275
P274
P276
P701
P702
P703
S101
POWER SW
SYSTEM CONTROL P.C.B. (VEP86082C)
P403
P405
P406
P407
P408
P401
P402
P423
P410
P411
P412
P413
P414
P417
P415
A/C HEAD ASSY (VBR0130)
CTL
TC
A CH1
A CH2
SERVO P.C.B. (VEP82015B)
P505
P506
P507
P509
P510
P511
P514
P531
P501
P502
P503
P504
P516
P515
P518
P517
P513
TRACKING VR P.C.B. (VEP80304A)
P908
VR902
P621
P622
DRUM M601
CAP M602
S REEL M603
T REEL M604
T SENSOR TS601
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

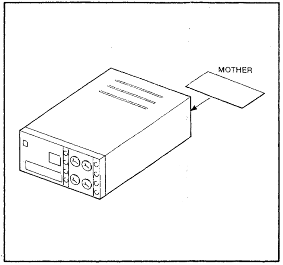

SERVO P.C.B. (VEP82015B)
TRACKING VR P.C.B. (VEP80304A)
VR902
P501
P502
P503
P504
P516
P515
P518
P517
P513
P621
P622
DRUM M601
CAP M602
S REEL M603
T REEL M604
T SENSOR TS601
Q601
S608
SL601
S607
S601
D601
Q603
S604
S606
SL602
M605
S605
Q602
PH601 ON1114
SL603
M606
S609
S0
P610
P609
P601
P602
R602 220 1/4W
R603 220 1/4W
D602
D603
MECHANICAL INTERMEDIATE 1 P.C.B. (VEP80139B)
P605
P606
P604
MECHANICAL INTERMEDIATE 2 P.C.B. (VEP80140B)
P611
MECHANICAL INTERMEDIATE 3 P.C.B. (VEP80141A)
P201
P213
P215
P203
P216
P205
P209
P206
P230
AUDIO UNIT. (VEB0392B)
P101
P103
P102
P104
P111
P109
POWER SUPPLY P.C.B. (VEP81016G)
P371
P372
CYLINDER
VIDEO 1 P.C.B. (VEP83076B)
P301
P312
P303
P311
P308
P310
P309
VIDEO 1 P.C.B. (VEP83076B)
VIDEO 2 P.C.B. (VEP83077B)
VIDEO 3 P.C.B. (VEP86051B)
VIDEO 4 P.C.B. (VEP86052B)
MOTHER BOARD P.C.B. (VEP80454B)
P905
VR901
HEADPHONES VR P.C.B. (VEP80303A)
P904
HEADPHONES JACK P.C.B. (VEP80302A)
P107
P106
POWER SUB P.C.B. (VEP81018B)
P901
P902
P903
P907
BATT 1
7
8
9
10
11
12
13
14
15
16
17


AUDIO UNIT. (VEB0392B)
P201
P213
P215
P203
P216
P205
P209
P206
P230
POWER SUPPLY P.C.B. (VEP81016G)
P101
P103
P102
P104
P111
P109
MOTHER BOARD P.C.B. (VEP80454B)
P301
P312
P303
P311
P308
P310
P309
VIDEO 1 P.C.B. (VEP83076B)
VIDEO 2 P.C.B. (VEP83077B)
VIDEO 3 P.C.B. (VEP88051B)
VIDEO 4 P.C.B. (VEP88052B)
JACK PANEL P.C.B. (VEP80305A)
P901
P902
P903
P907
S901
J901
J903
J904
J905
J906
J907
J908
HEADPHONES VR P.C.B. (VEP80303A)
P905
VR901
HEADPHONES JACK P.C.B. (VEP80302A)
P904
RF CONVERTER UNIT (ENC47956:AU-505-E) (ENC47957:AU-505-B)
P906
RF OUT
ANT IN
POWER SUB P.C.B. (VEP81018B)
P107
P108
BREAKER F1 (6.3A)
OUT
IN
VIDEO 1 P.C.B. (VEP83076B)
P371
P372
CYLINDER
Y
Y
C
C
BATT 1
BATT 2
BATT 3
12
13
14
15
16
17
18
19

MOTHER BOARD P.C. BOARD (VEP80454A) (FOR AU-520/S)
(VEP80454B) (FOR AU-505)

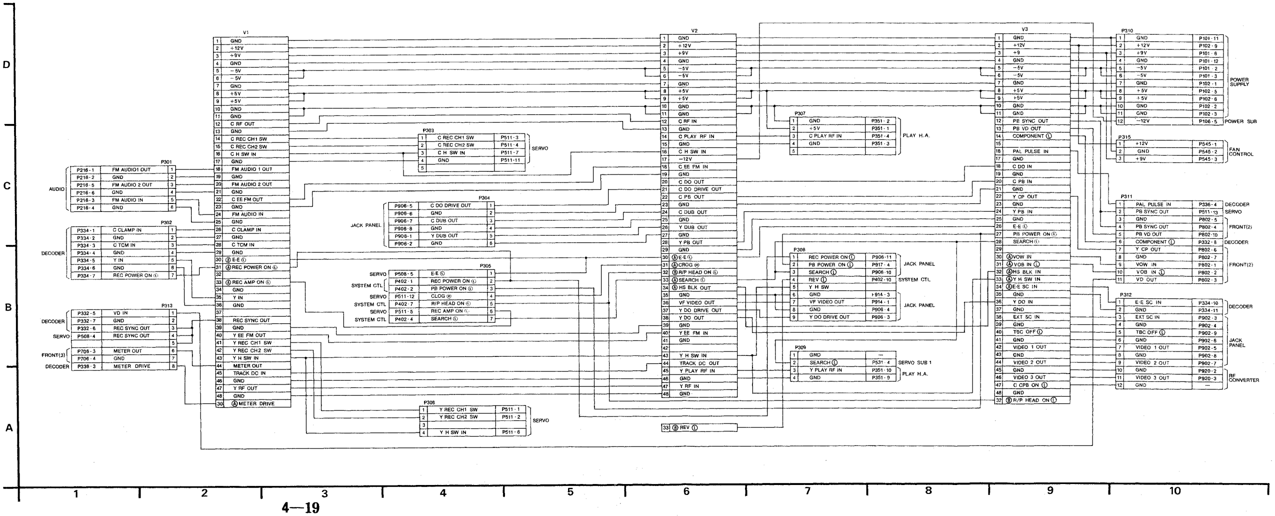

C
B
A
1
2
3
4
5
P301
P302
P310
P303
P304
P305
P306
P307
P308
P309
P311
P312
P315

P.C. BOARD LOCATION

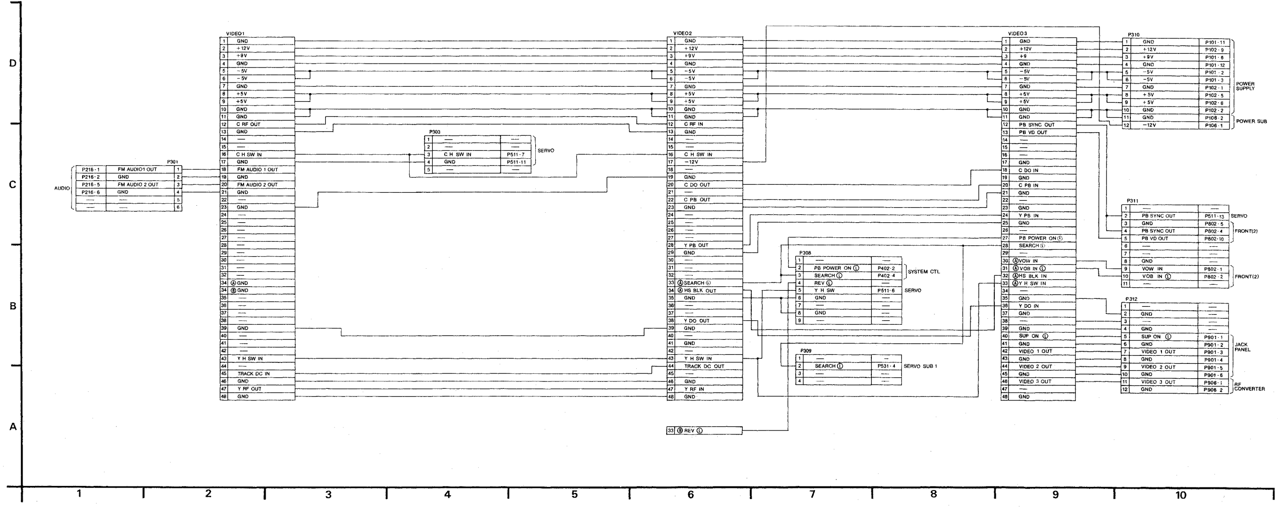


NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

MOTHER BOARD SCHEMATIC DIAGRAM (FOR AU-520/S)

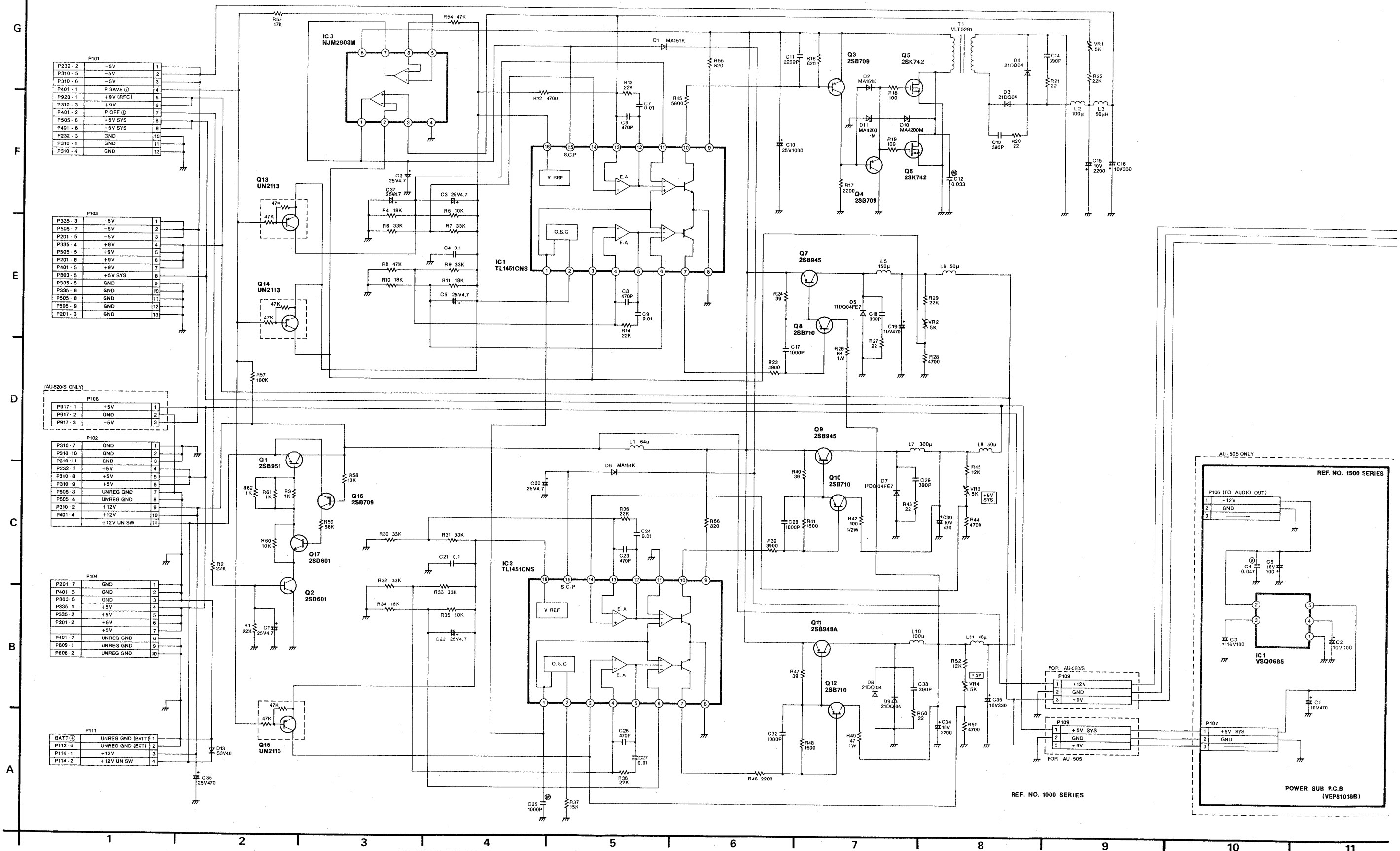

D
C
B
A
1
2
3
4
5
6
7
8
9
10
V1
V2
V3
P301
P302
P303
P304
P305
P306
P307
P308
P309
P310
P311
P312
P313
P315
AUDIO
DECODER
SERVO
FRONT(3)
JACK PANEL
SYSTEM CTL
PLAY H.A.
SERVO SUB 1
POWER SUPPLY
POWER SUB
FAN CONTROL
FRONT(2)
RF CONVERTER

MOTHER BOARD SCHEMATIC DIAGRAM (FOR AU-505)


VIDEO1
VIDEO2
VIDEO3
P301
P303
P308
P309
P310
P311
P312
AUDIO
SERVO
SYSTEM CTL
SERVO SUB 1
POWER SUPPLY
POWER SUB
FRONT(2)
JACK PANEL
RF CONVERTER
D
C
B
A
1
2
3
4
5
6
7
8
9
10

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

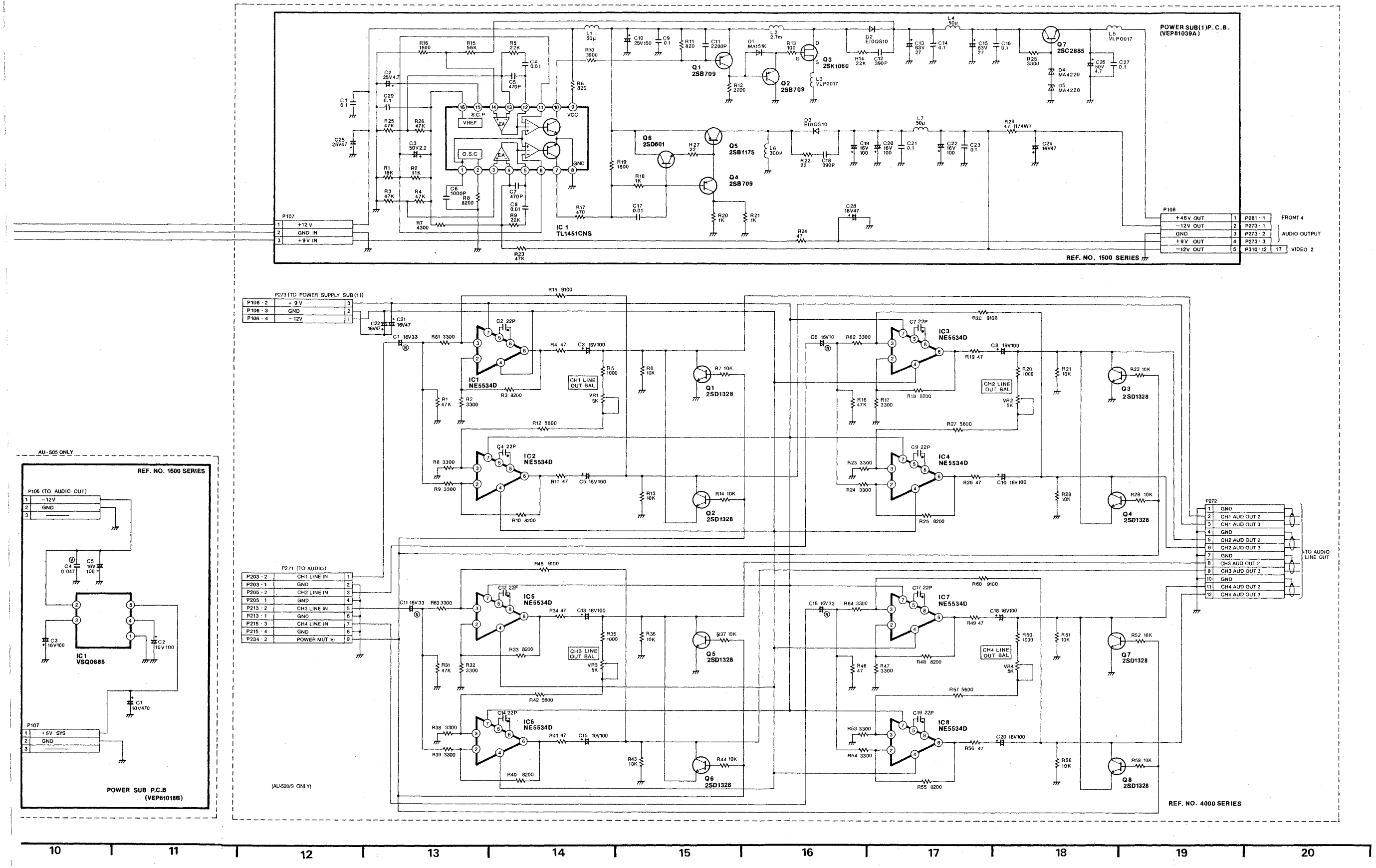
POWER SUPPLY/AUDIO OUTPUT SCHEMATIC DIAGRAM (FOR AU-520/S)
POWER SUPPLY SCHEMATIC DIAGRAM (FOR AU-505)


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
P101
P232 - 2 | −5V | 1
P310 - 5 | −5V | 2
P310 - 6 | −5V | 3
P401 - 1 | P SAVE Ⓛ | 4
P920 - 1 | +9V (RFC) | 5
P310 - 3 | +9V | 6
P401 - 2 | P OFF Ⓛ | 7
P505 - 6 | +5V SYS | 8
P401 - 6 | +5V SYS | 9
P232 - 3 | GND | 10
P310 - 1 | GND | 11
P310 - 4 | GND | 12
P103
P335 - 3 | −5V | 1
P505 - 7 | −5V | 2
P201 - 5 | −5V | 3
P335 - 4 | +9V | 4
P505 - 5 | +9V | 5
P201 - 8 | +9V | 6
P401 - 5 | +9V | 7
P803 - 5 | +5V SYS | 8
P335 - 5 | GND | 9
P335 - 6 | GND | 10
P505 - 8 | GND | 11
P505 - 9 | GND | 12
P201 - 3 | GND | 13
(AU-520/S ONLY)
P108
P917 - 1 | +5V | 1
P917 - 2 | GND | 2
P917 - 3 | −5V | 3
P102
P310 - 7 | GND | 1
P310 - 10 | GND | 2
P310 - 11 | GND | 3
P232 - 1 | +5V | 4
P310 - 8 | +5V | 5
P310 - 9 | +5V | 6
P505 - 3 | UNREG GND | 7
P505 - 4 | UNREG GND | 8
P310 - 2 | +12V | 9
P401 - 4 | +12V | 10
+12V UN SW | 11
P104
P201 - 7 | GND | 1
P401 - 3 | GND | 2
P803 - 5 | GND | 3
P335 - 1 | +5V | 4
P335 - 2 | +5V | 5
P201 - 2 | +5V | 6
+5V | 7
P401 - 7 | UNREG GND | 8
P809 - 1 | UNREG GND | 9
P606 - 2 | UNREG GND | 10
P111
BATT ⊕ | UNREG GND (BATT) | 1
P112 - 4 | UNREG GND (EXT) | 2
P114 - 1 | +12V | 3
P114 - 2 | +12V UN SW | 4
IC3 NJM2903M
IC1 TL1451CNS
IC2 TL1451CNS
S.C.P
V REF
O.S.C
E.A
Q13 UN2113
Q14 UN2113
Q15 UN2113
Q1 2SB951
Q2 2SD601
Q16 2SB709
Q17 2SD601
Q3 2SB709
Q4 2SB709
Q5 2SK742
Q6 2SK742
Q7 2SB945
Q8 2SB710
Q9 2SB945
Q10 2SB710
Q11 2SB948A
Q12 2SB710
T1 VLT0291
D1 MA151K
D2 MA151K
D3 21DQ04
D4 21DQ04
D5 11DQ04FE7
D6 MA151K
D7 11DQ04FE7
D8 21DQ04
D9 21DQ04
D10 MA4200M
D11 MA4200·M
D13 S3V40
L1 64μ
L2 100μ
L3 50μH
L5 150μ
L6 50μ
L7 300μ
L8 50μ
L10 100μ
L11 40μ
VR1 5K
VR2 5K
VR3 5K
VR4 5K
+5V SYS
+5V
FOR AU-520/S
P109
1 | +12V
2 | GND
3 | +9V
P109
1 | +5V SYS
2 | GND
3 | +9V
FOR AU-505
REF. NO. 1000 SERIES
AU-505 ONLY
REF. NO. 1500 SERIES
P106 (TO AUDIO OUT)
1 | −12V
2 | GND
3 | ——
IC1 VSQ0685
C1 10V470
C2 10V100
C3 16V100
C4 0.047
C5 16V 100
P107
1 | +5V SYS
2 | GND
3 | ——
POWER SUB P.C.B (VEP81018B)

REVERSE SIDE

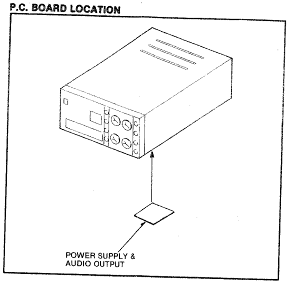
MOTHER BOARD

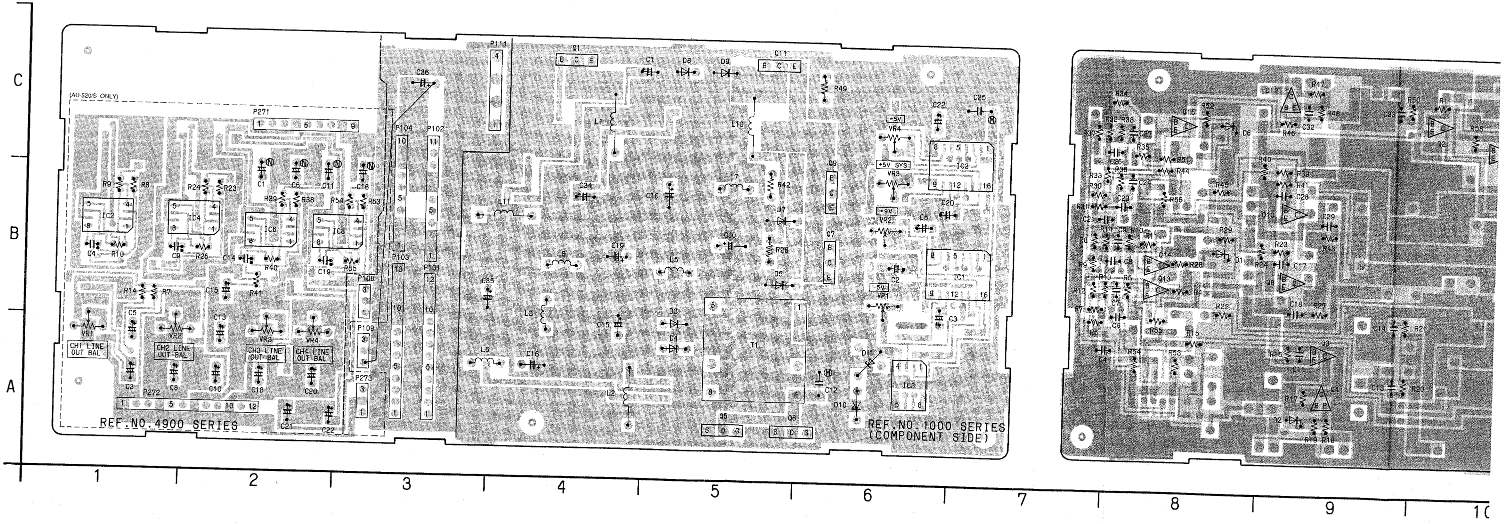
Effective from
Serial No. H9TNA0128 (FOR AU-505)


POWER SUB(1)P.C.B. (VEP81039A)
IC 1 TL1451CNS
Q1 2SB709
Q2 2SB709
Q3 2SK1060
Q4 2SB709
Q5 2SB1175
Q6 2SD601
Q7 2SC2885
D1 MA151K
D2 E10QS10
D3 E10QS10
D4 MA4220
D5 MA4220
S.C.P
VREF
O.S.C
EA
VCC
GND
P107
+12 V
GND IN
+9V IN
P106
+48V OUT
−12V OUT
GND
+9V OUT
−12V OUT
P281 · 1
P273 · 1
P273 · 2
P273 · 3
P310 · 12
FRONT 4
AUDIO OUTPUT
VIDEO 2
REF. NO. 1500 SERIES
P273 (TO POWER SUPPLY SUB(1))
P106 · 2 +9V
P106 · 3 GND
P106 · 4 −12V
IC1 NE5534D
IC2 NE5534D
IC3 NE5534D
IC4 NE5534D
IC5 NE5534D
IC6 NE5534D
IC7 NE5534D
IC8 NE5534D
CH1 LINE OUT BAL
CH2 LINE OUT BAL
CH3 LINE OUT BAL
CH4 LINE OUT BAL
Q1 2SD1328
Q2 2SD1328
Q3 2SD1328
Q4 2SD1328
Q5 2SD1328
Q6 2SD1328
Q7 2SD1328
Q8 2SD1328
P271 (TO AUDIO)
P203 · 2 CH1 LINE IN
P203 · 1 GND
P205 · 2 CH2 LINE IN
P205 · 1 GND
P213 · 2 CH3 LINE IN
P213 · 1 GND
P215 · 3 CH4 LINE IN
P215 · 4 GND
P234 · 2 POWER MUT
P272
GND
CH1 AUD OUT 2
CH1 AUD OUT 3
GND
CH2 AUD OUT 2
CH2 AUD OUT 3
GND
CH3 AUD OUT 2
CH3 AUD OUT 3
GND
CH4 AUD OUT 2
CH4 AUD OUT 3
TO AUDIO LINE OUT
(AU-520/S ONLY)
REF. NO. 4000 SERIES
AU-505 ONLY
REF. NO. 1500 SERIES
P106 (TO AUDIO OUT)
−12V
GND
IC1 VSQ0685
P107
+5V SYS
GND
POWER SUB P.C.B (VEP81018B)
10
11
12
13
14
15
16
17
18
19
20

POWER SUPPLY/AUDIO OUTPUT P.C. BOARD (VEP81016F) (FOR AU-520/S)
POWER SUPPLY P.C. BOARD (VEP81016G) (FOR AU-505)

P.C. BOARD LOCATION


POWER SUPPLY &
AUDIO OUTPUT

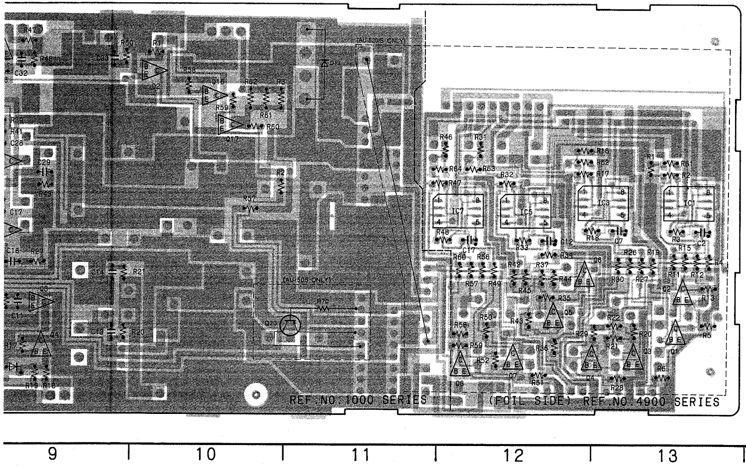

C
B
A
1
2
3
4
5
6
7
8
9
(AU-520/S ONLY)
P271
P272
CH1 LINE OUT BAL
CH2 LINE OUT BAL
CH3 LINE OUT BAL
CH4 LINE OUT BAL
VR1
VR2
VR3
VR4
IC2
IC4
IC6
IC8
REF.NO.4900 SERIES
P104
P102
P103
P101
P108
P109
P273
P111
Q1
Q11
Q5
Q6
Q7
Q9
T1
L1
L2
L3
L5
L6
L7
L8
L10
L11
IC1
IC2
IC3
+5V
+5V SYS
+9V
-5V
REF.NO.1000 SERIES
(COMPONENT SIDE)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

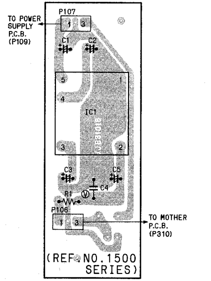
POWER SUPPLY P.C.B.	
Transistor	
Q1001	C-4
Q1002	C-10
Q1003	B-9
Q1004	A-9
Q1005	A-5
Q1006	A-5
Q1007	B-6
Q1008	B-9
Q1009	C-6
Q1010	B-9
Q1011	C-5
Q1012	C-9
Q1013	B-8
Q1014	B-8
Q1015	C-8
Q1016	C-10
Q1017	C-10
Q4001	A-13
Q4002	B-13
Q4003	A-13
Q4004	A-12
Q4005	A-12
Q4006	B-13
Q4007	A-12
Q4008	A-12
Integrated Circuit	
IC1001	B-7
IC1002	C-7
IC1003	A-6
IC4001	B-14
IC4002	B-1
IC4003	B-13
IC4004	B-2
IC4005	B-12
IC4006	B-2
IC4007	B-12
IC4008	B-3
Adjustment	
VR1001	B-6
VR1002	B-6
VR1003	B-6
VR1004	C-6
VR4001	A-1
VR4002	A-1
VR4003	A-2
VR4004	A-2

ADDRESS INFORMATION

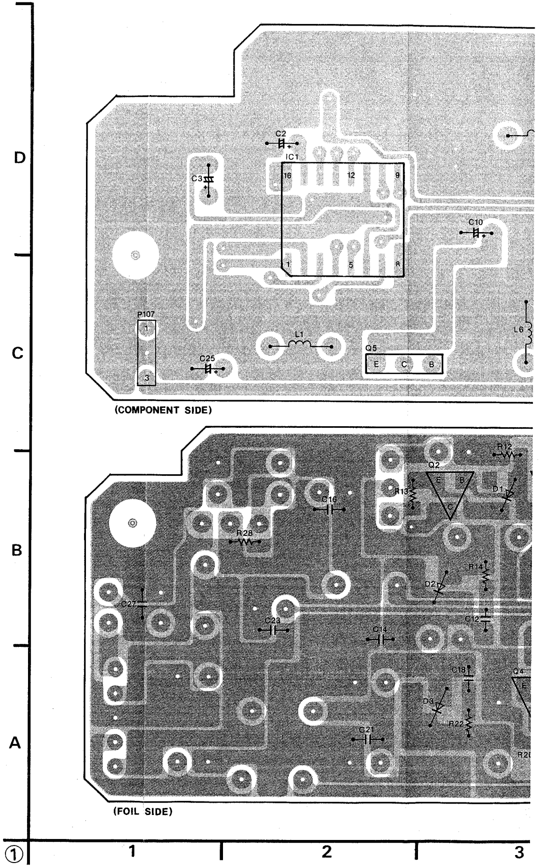
Effective from
Serial No. H9TNA0128 (FOR AU-505)


AU-520/S ONLY
AU-505 ONLY
REF.NO.1000 SERIES
(FOIL SIDE) REF.NO.4900 SERIES
9
10
11
12
13
14

POWER SUB (1) P.C. BOARD (VEP81018B)
(FOR AU-505)


P107
TO POWER SUPPLY P.C.B. (P109)
IC1
P106
TO MOTHER P.C.B. (P310)
(REF.NO.1500 SERIES)

POWER SUB (1) P.C. BOARD (VEP81039A) (FOR AU-

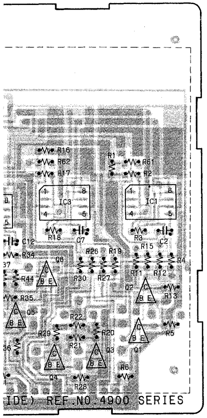

D
C
B
A
(COMPONENT SIDE)
(FOIL SIDE)
①
1
2
3

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

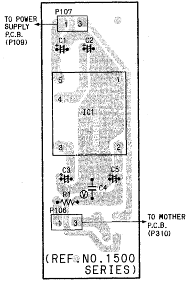
B-2
B-12
B-3

B-6
B-6
B-6
C-6
A-1
A-1
A-2
A-2

R AU-505)

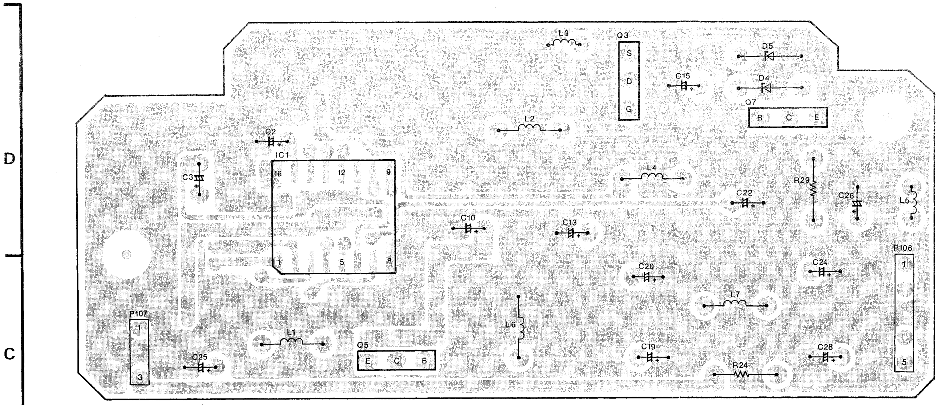

R16
R62
R17
R1
R61
R2
IC3
IC1
R18
C7
R3
C2
R26
R19
R15
C12
R34
Q6
R4
R44
R30
R27
R11
R12
R13
R35
Q5
Q2
R22
R29
R20
R5
R21
Q3
Q1
R6
Q4
R28
IDE) REF.NO 4900 SERIES
13
14

POWER SUB (1) P.C. BOARD (VEP81018B)
(FOR AU-505)

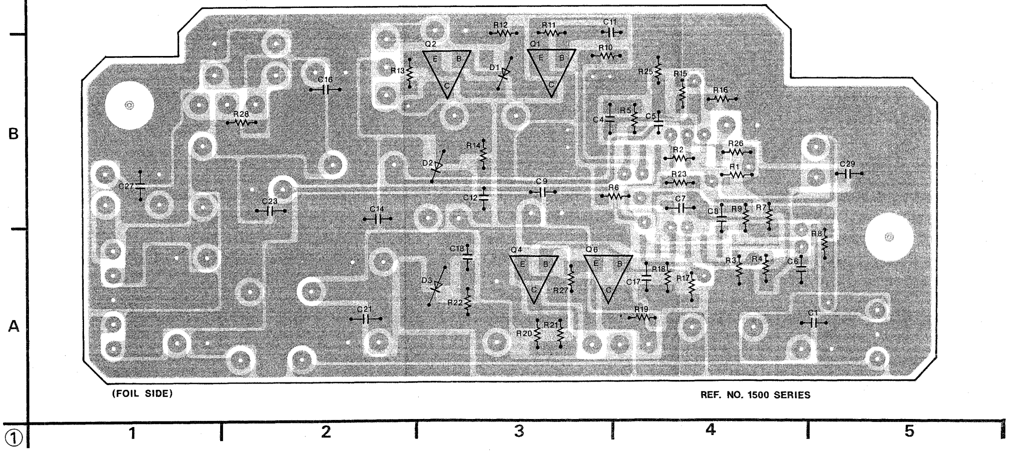

TO POWER SUPPLY P.C.B. (P109)
P107
1
3
C1
C2
5
1
4
IC1
3
2
C3
C5
C4
R1
P106
1
3
TO MOTHER P.C.B. (P310)
(REF.NO.1500 SERIES)

POWER SUB (1) P.C. BOARD (VEP81039A) (FOR AU-520/S)

Effective from
Serial No. H9TNA0128 (FOR AU-505)


D
C
L3
Q3
S
D
G
D5
D4
C15
Q7
B
C
E
L2
C2
IC1
16
12
9
1
5
8
C3
L4
C22
R29
C26
L5
C10
C13
C20
C24
P106
1
5
P107
1
3
L1
C25
Q5
E
C
B
L6
C19
L7
C28
R24

(COMPONENT SIDE)


B
A
R12
R11
C11
Q2
E
B
C
Q1
E
B
C
R13
D1
R10
R25
R15
R16
C16
C4
R5
C5
R28
R26
R2
R14
D2
R1
R23
C29
C27
C9
R6
C12
C23
C14
C7
C8
R9
R7
R8
C18
Q4
E
B
C
Q6
E
B
C
R3
R4
C6
D3
R27
C17
R18
R17
R22
C21
R19
C1
R20
R21
①
1
2
3
4
5

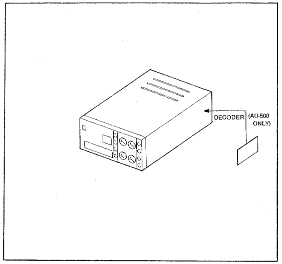
(FOIL SIDE)

REF. NO. 1500 SERIES

CODER MAIN P.C. BOARD (VEP88048A) (FOR AU-520/S ONLY)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

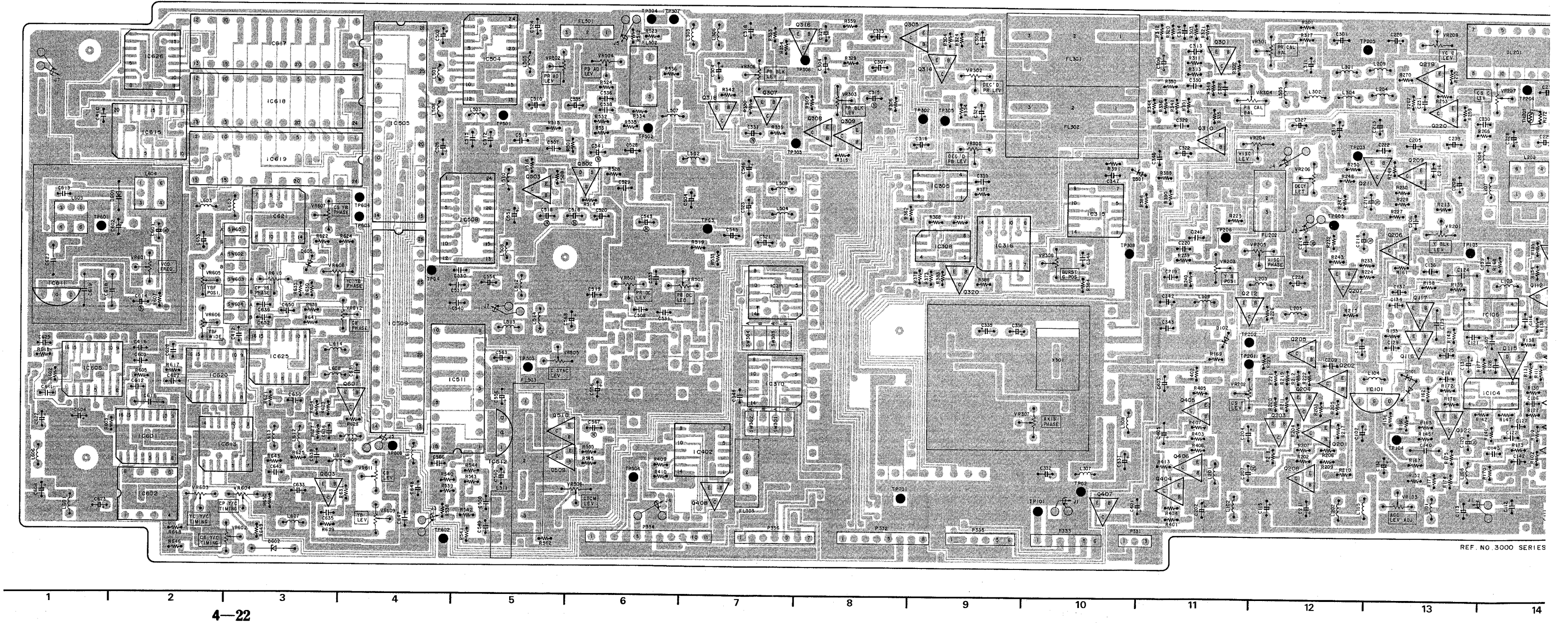
P.C. BOARD LOCATION


DECODER
(AU-500 ONLY)

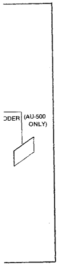
Transistors	
Q3101	A-16
Q3102	A-16
Q3103	B-15
Q3104	B-14
Q3105	B-14
Q3106	B-14
Q3107	C-15
Q3108	C-14
Q3109	C-15
Q3110	C-15
Q3111	D-15
Q3112	C-14
Q3113	D-14
Q3114	D-14
Q3115	C-14
Q3116	C-13
Q3117	C-13
Q3118	C-16
Q3119	C-16
Q3120	D-16

ADDRESS INFORMATIO

DECODER MAIN P.C. BOARD (VEP88048A)


IC617
IC618
IC619
IC626
IC615
IC505
IC504
IC509
IC508
IC511
IC512
IC621
IC625
IC620
IC606
IC601
IC602
IC613
IC311
IC310
IC402
IC305
IC308
IC316
IC315
IC101
IC104
IC105
FL301
FL302
FL501
FL303
X301
DL201
P332
P333
P334
P335
P336
P331
REF. NO. 3000 SERIES
1
2
3
4
5
6
7
8
9
10
11
12
13
14

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

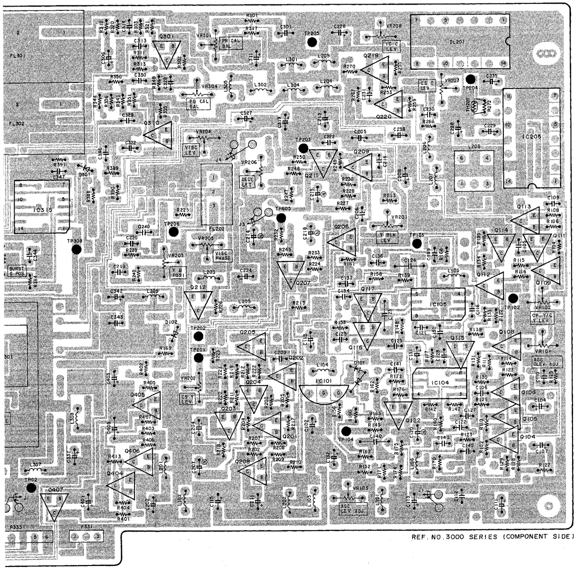

DDER
(AU-500 ONLY)

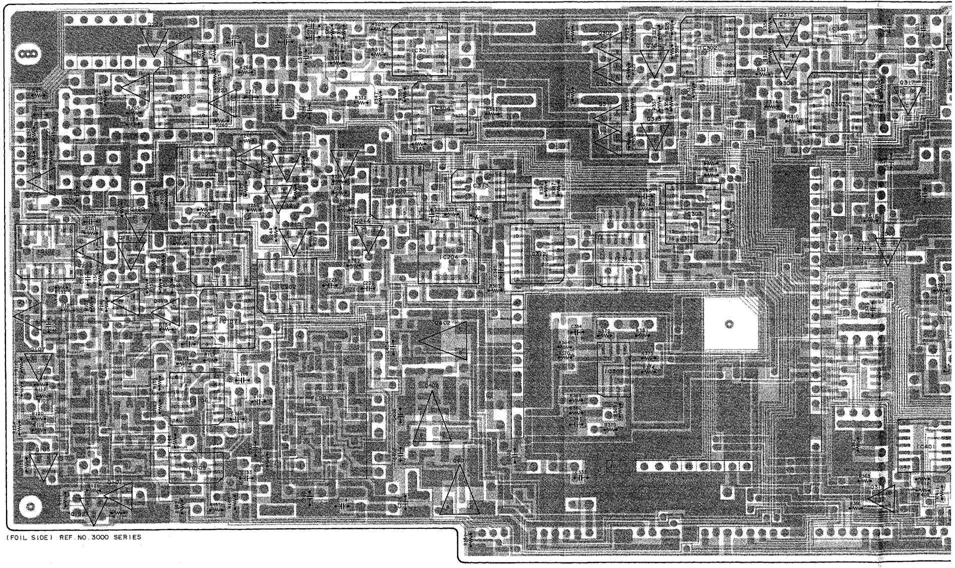
DECODER P.C.B.

Transistors		Q3121	D-16	Q3220	E-13	Q3316	F-8	Q3510	B-5	IC3202	C-17
Q3101	A-16	Q3122	B-13	Q3221	E-16	Q3317	E-23	Q3511	B-25	IC3203	D-18
Q3102	A-16	Q3201	B-12	Q3222	C-16	Q3318	E-7	Q3512	A-24	IC3204	C-19
Q3103	B-15	Q3202	C-12	Q3223	E-17	Q3319	A-23	Q3513	A-24	IC3205	E-14
Q3104	B-14	Q3203	B-12	Q3224	E-16	Q3320	C-9	Q3601	B-4	IC3206	E-16
Q3105	B-14	Q3204	B-12	Q3225	D-15	Q3401	B-19	Q3602	A-26	IC3301	E-19
Q3106	B-14	Q3205	C-12	Q3301	E-11	Q3402	C-19	Q3603	B-3	IC3302	E-21
Q3107	C-15	Q3206	D-13	Q3302	E-20	Q3403	B-19	Q3604	B-26	IC3303	E-22
Q3108	C-14	Q3207	C-12	Q3303	E-20	Q3404	B-11	Q3605	A-26	IC3304	E-19
Q3109	C-15	Q3208	B-12	Q3304	E-21	Q3405	B-11	Q3606	B-27	IC3305	D-9
Q3110	C-15	Q3209	D-13	Q3305	F-9	Q3406	B-11			IC3306	E-22
Q3111	D-15	Q3210	D-17	Q3306	E-22	Q3407	A-10	**Integrated Circuits**		IC3307	D-21
Q3112	C-14	Q3211	D-12	Q3307	E-7	Q3408	A-7	IC3101	B-13	IC3308	D-9
Q3113	D-14	Q3212	C-11	Q3308	E-8	Q3501	E-24	IC3102	C-15	IC3309	B-20
Q3114	D-14	Q3213	D-18	Q3309	E-8	Q3502	D-5	IC3103	B-17	IC3310	B-7
Q3115	C-14	Q3214	D-18	Q3310	E-11	Q3503	D-5	IC3104	B-14	IC3311	C-7
Q3116	C-13	Q3215	D-18	Q3311	E-20	Q3504	E-23	IC3105	C-14	IC3312	C-20
Q3117	C-13	Q3216	D-17	Q3312	E-20	Q3506	D-24	IC3106	B-17	IC3313	D-19
Q3118	C-16	Q3217	D-17	Q3313	E-21	Q3507	B-24	IC3107	C-17	IC3314	C-20
Q3119	C-16	Q3218	E-16	Q3314	E-9	Q3508	A-24	IC3108	C-17	IC3315	D-10
Q3120	D-16	Q3219	E-13	Q3315	F-22	Q3509	B-5	IC3201	D-17	IC3316	D-9

ADDRESS INFORMATION

IC3401	B-23	IC3608	C-28	**Test Points**	
IC3402	B-7	IC3609	C-29	TP3101	A-
IC3501	E-24	IC3610	C-28	TP3102	C-
IC3502	D-24	IC3611	C-1	TP3103	D-
IC3503	C-24	IC3612	B-28	TP3104	B-
IC3504	E-5	IC3613	B-3	TP3201	C-
IC3505	E-4	IC3614	B-27	TP3202	C-
IC3506	E-24	IC3615	E-2	TP3203	E-
IC3507	D-24	IC3616	E-28	TP3204	E-
IC3508	D-5	IC3617	E-3	TP3205	E-
IC3509	C-4	IC3618	E-3	TP3206	D-
IC3510	A-25	IC3619	D-3	TP3302	E-
IC3511	B-5	IC3620	B-2	TP3303	D-
IC3512	B-5	IC3621	D-3	TP3304	F-
IC3601	B-2	IC3622	D-27	TP3305	E-
IC3602	A-2	IC3623	C-27	TP3306	E-
IC3603	B-28	IC3624	B-27	TP3307	F-
IC3604	A-28	IC3625	C-3	TP3308	D-
IC3605	B-27	IC3626	E-2	TP3501	E-
IC3606	B-1	IC3627	E-28	TP3502	E-
IC3607	D-29	IC3628	E-29	TP3503	C-
		IC3629	A-26		

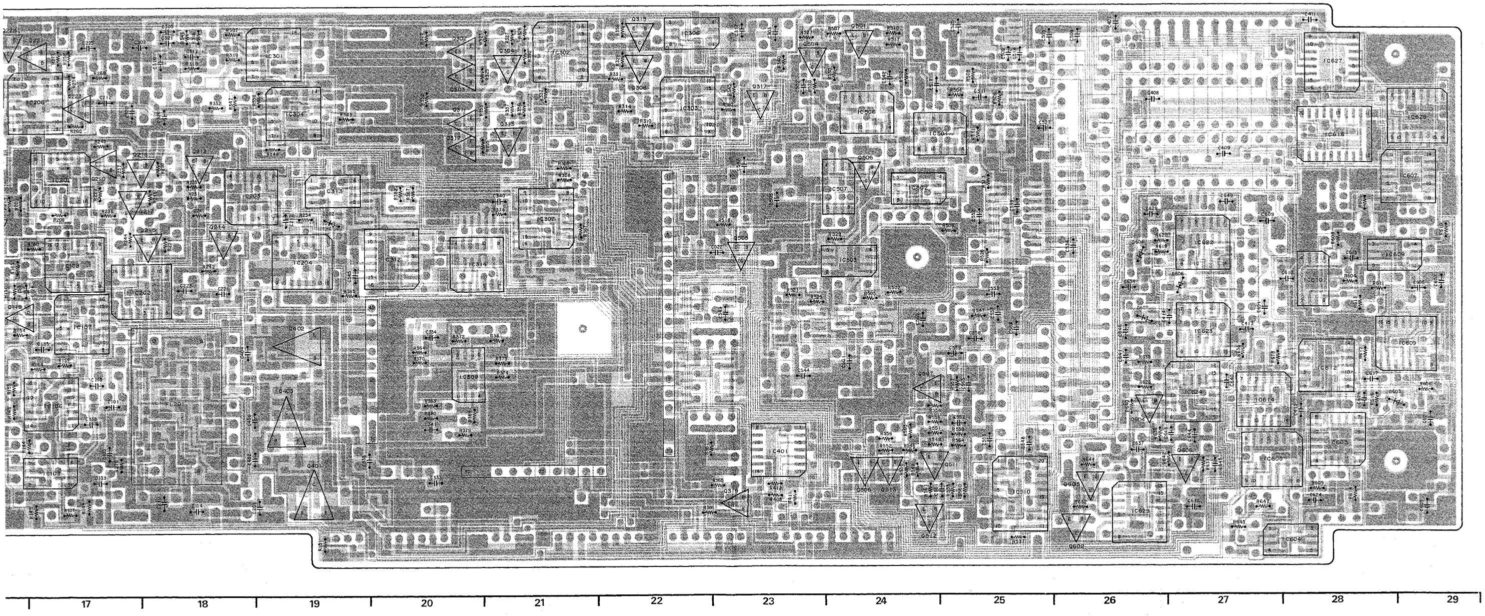

FL301
FL302
IC315
TP308
TP206
TP205
TP203
TP202
TP201
TP603
TP103
TP102
TP104
TP02
DL201
IC205
IC105
IC101
IC104
VR301
VR304
VR204
VR206
VR205
VR203
VR202
VR201
VR207
VR101
VR103
VR208
PAL CAL BAL
PD CAL BAL
V-ISC LEV
DECY LEV
V-ISC PHASE
Y BLK LEV
CP-Y/C Y LEV
AGC LEV ADJ
Y/C-C LEV
BURST G POS
Q301
Q219
Q220
Q209
Q211
Q206
Q207
Q212
Q205
Q202
Q204
Q203
Q201
Q208
Q117
Q116
Q115
Q113
Q114
Q112
Q111
Q110
Q109
Q108
Q106
Q105
Q104
Q103
Q102
Q101
Q405
Q406
Q404
Q407
L301
L302
L304
L204
L209
L208
L206
L203
L305
L307
L105
L104
REF. NO. 3000 SERIES (COMPONENT SIDE)


IC3204
IC3205
IC3102
IC3103
IC3305
IC3309
IC3601
Q3402
Q3401
Q3303
Q3306
Q3317
(FOIL SIDE) REF. NO. 3000 SERIES

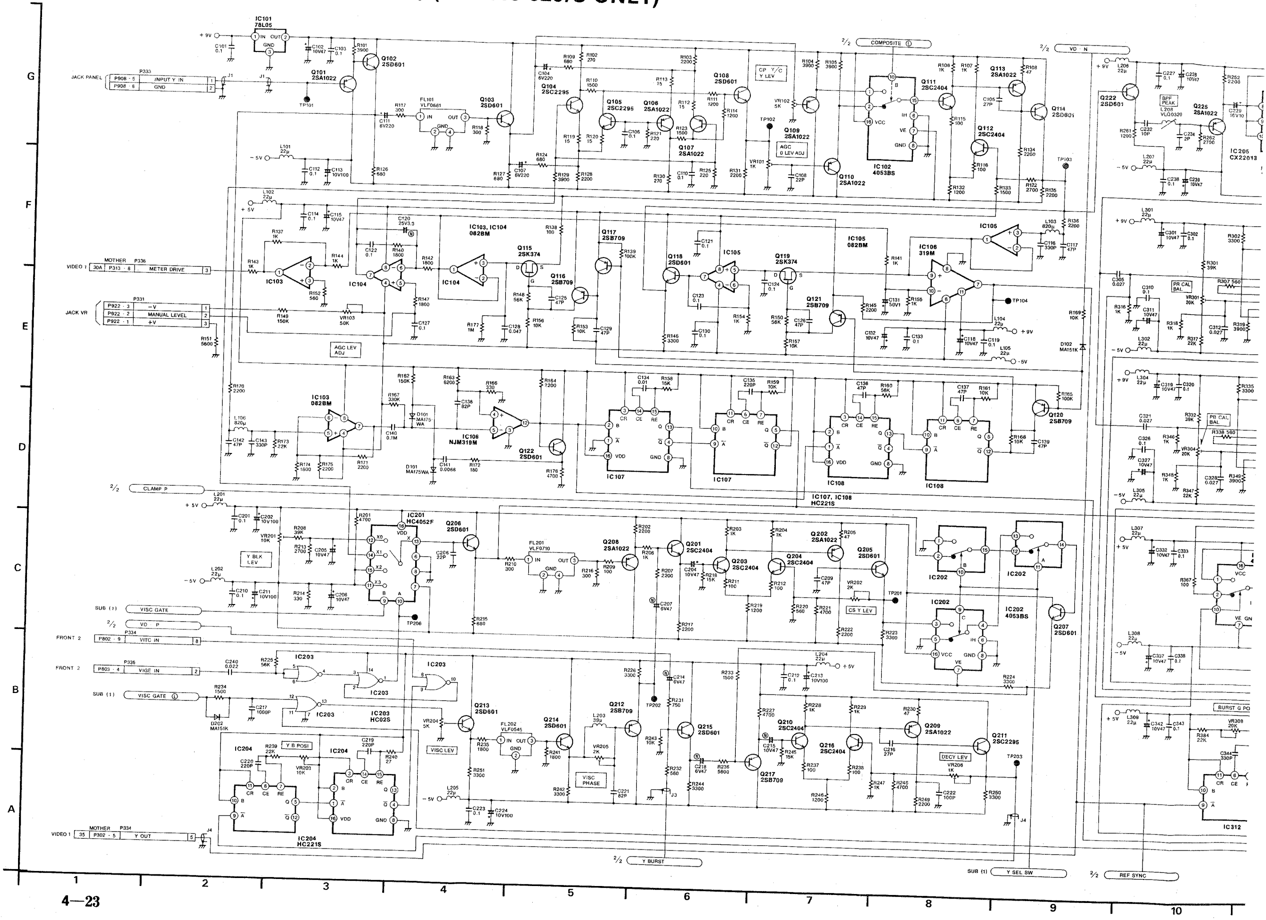
10 11 12 13 14 15 16 17 18 19 20 21 22 23

ECODER P.C.B.

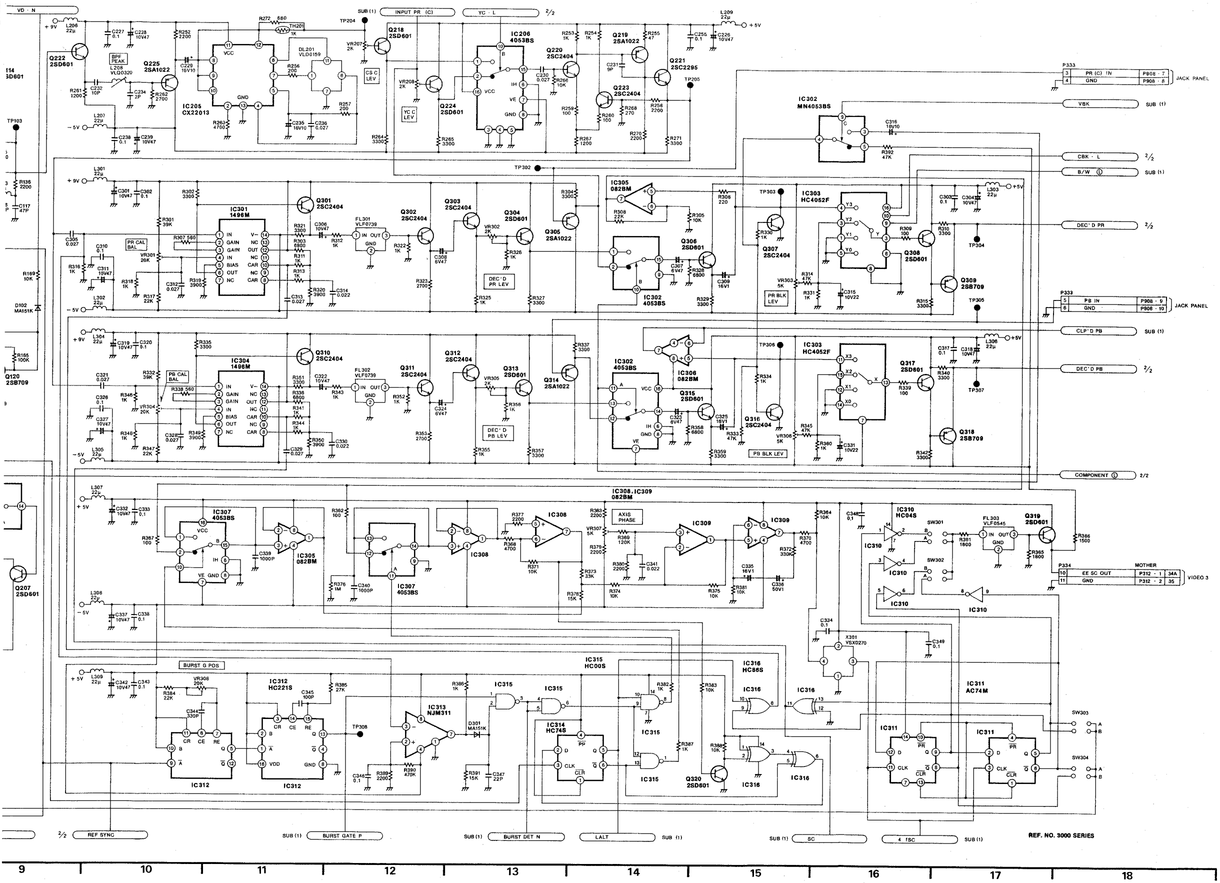
Q3316	F-8
Q3317	E-23
Q3318	E-7
Q3319	A-23
Q3320	C-9
Q3401	B-19
Q3402	C-19
Q3403	B-19
Q3404	B-11
Q3405	B-11
Q3406	B-11
Q3407	A-10
Q3408	A-7
Q3501	E-24
Q3502	D-5
Q3503	D-5
Q3504	E-23
Q3506	D-24
Q3507	B-24
Q3508	A-24
Q3509	B-5
Q3510	B-5
Q3511	B-25
Q3512	A-24
Q3513	A-24
Q3601	B-4
Q3602	A-26
Q3603	B-3
Q3604	B-26
Q3605	A-26
Q3606	B-27
Integrated Circuits	
IC3101	B-13
IC3102	C-15
IC3103	B-17
IC3104	B-14
IC3105	C-14
IC3106	B-17
IC3107	C-17
IC3108	C-17
IC3201	D-17
IC3202	C-17
IC3203	D-18
IC3204	C-19
IC3205	E-14
IC3206	E-16
IC3301	E-19
IC3302	E-21
IC3303	E-22
IC3304	E-19
IC3305	D-9
IC3306	E-22
IC3307	D-21
IC3308	D-9
IC3309	B-20
IC3310	B-7
IC3311	C-7
IC3312	C-20
IC3313	D-19
IC3314	C-20
IC3315	D-10
IC3316	D-9
IC3401	B-23
IC3402	B-7
IC3501	E-24
IC3502	D-24
IC3503	C-24
IC3504	E-5
IC3505	E-4
IC3506	E-24
IC3507	D-24
IC3508	D-5
IC3509	C-4
IC3510	A-25
IC3511	B-5
IC3512	B-5
IC3601	B-2
IC3602	A-2
IC3603	B-28
IC3604	A-28
IC3605	B-27
IC3606	B-1
IC3607	D-29
IC3608	C-28
IC3609	C-29
IC3610	C-28
IC3611	C-1
IC3612	B-28
IC3613	B-3
IC3614	B-27
IC3615	E-2
IC3616	E-28
IC3617	E-3
IC3618	E-3
IC3619	D-3
IC3620	B-2
IC3621	D-3
IC3622	D-27
IC3623	C-27
IC3624	B-27
IC3625	C-3
IC3626	E-2
IC3627	E-28
IC3628	E-29
IC3629	A-26
Test Points	
TP3101	A-10
TP3102	C-14
TP3103	D-13
TP3104	B-13
TP3201	C-11
TP3202	C-11
TP3203	E-12
TP3204	E-14
TP3205	E-12
TP3206	D-11
TP3302	E-9
TP3303	D-7
TP3304	F-6
TP3305	E-9
TP3306	E-8
TP3307	F-6
TP3308	D-10
TP3501	E-5
TP3502	E-6
TP3503	C-5
TP3504	B-6
TP3601	D-1
TP3602	A-4
TP3603	D-4
TP3604	D-4
TP3605	D-12
TP3606	B-4
TPG2	A-10
TPG3	D-7
TPG4	C-4
Adjustments	
VR3101	C-15
VR3102	C-15
VR3103	A-13
VR3201	D-13
VR3202	B-11
VR3203	C-11
VR3204	E-12
VR3205	D-12
VR3206	D-12
VR3207	E-14
VR3208	E-13
VR3301	E-12
VR3302	E-9
VR3303	E-8
VR3304	E-12
VR3305	E-9
VR3306	E-7
VR3307	B-10
VR3308	C-10
VR3501	C-6
VR3502	E-5
VR3503	C-7
VR3504	E-6
VR3505	C-5
VR3506	A-6
VR3601	C-2
VR3602	A-3
VR3603	A-2
VR3604	A-3
VR3605	C-2
VR3606	C-2
VR3607	D-3
VR3608	C-3
VR3610	C-3
VR3611	B-4
VR3612	C-4



DECODER SCHEMATIC DIAGRAM (1/2) (FOR AU-520/S ONLY)


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
IC101 78L05
JACK PANEL
P908 · 5 INPUT Y IN
P908 · 6 GND
Q101 2SA1022
Q102 2SD601
Q103 2SD601
FL101 VLF0681
Q104 2SC2295
Q105 2SC2295
Q106 2SA1022
Q107 2SA1022
Q108 2SD601
CP Y/C Y LEV
Q109 2SA1022
AGC 0 LEV ADJ
Q110 2SA1022
COMPOSITE
IC102 4053BS
Q111 2SC2404
Q112 2SC2404
Q113 2SA1022
Q114 2SD601
VD N
Q222 2SD601
Q225 2SA1022
BPF PEAK
IC205 CX22013
VIDEO 1
MOTHER P313 · 8 METER DRIVE
JACK VR
P922 · 3 −V
P922 · 2 MANUAL LEVEL
P922 · 1 +V
IC103
IC104
IC103, IC104 082BM
Q115 2SK374
Q116 2SB709
Q117 2SB709
Q118 2SD601
IC105
Q119 2SK374
Q121 2SB709
IC105 082BM
IC106 319M
AGC LEV ADJ
IC103 082BM
IC106 NJM319M
Q122 2SD601
IC107
IC108
IC107, IC108 HC221S
Q120 2SB709
PR CAL BAL
PB CAL BAL
CLAMP P
IC201 HC4052F
Q206 2SD601
Y BLK LEV
FL201 VLF0710
Q208 2SA1022
Q201 2SC2404
Q203 2SC2404
Q204 2SC2404
Q202 2SA1022
Q205 2SD601
CS Y LEV
IC202
IC202 4053BS
Q207 2SD601
SUB (1) VISC GATE
VD P
FRONT 2 P802 · 9 VITC IN
FRONT 2 P803 · 4 VIGE IN
SUB (1) VISC GATE
IC203
IC203 HC02S
IC204
IC204 HC221S
Y B POSI
VISC LEV
Q213 2SD601
FL202 VLF0545
Q214 2SD601
VISC PHASE
Q212 2SB709
Q215 2SD601
Q217 2SB709
Q210 2SC2404
Q216 2SC2404
Q209 2SA1022
Q211 2SC2295
DECY LEV
VIDEO 1 MOTHER P302 · 5 Y OUT
Y BURST
SUB (1) Y SEL SW
REF SYNC
BURST G PO
IC312
TP101
TP102
TP103
TP104
TP201
TP202
TP203
TP206
J1
J3
J4
+9V
−5V
+5V

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY



VD · N
INPUT PR (C)
YC · L
IC205 CX22013
IC206 4053BS
Q218 2SD601
Q219 2SA1022
Q220 2SC2404
Q221 2SC2295
Q222 2SD601
Q223 2SC2404
Q224 2SD601
Q225 2SA1022
BPF PEAK
CS C LEV
YC C LEV
DL201 VLD0159
TP103
TP204
TP205
TP302
TP303
TP304
TP305
TP306
TP307
TP308
IC301 1496M
IC302 MN4053BS
IC302 4053BS
IC303 HC4052F
IC304 1496M
IC305 082BM
IC306 082BM
IC307 4053BS
IC308, IC309 082BM
IC310 HC04S
IC311 AC74M
IC312 HC221S
IC313 NJM311
IC314 HC74S
IC315 HC00S
IC316 HC86S
FL301 VLF0739
FL302 VLF0739
FL303 VLF0545
Q301 2SC2404
Q302 2SC2404
Q303 2SC2404
Q304 2SD601
Q305 2SA1022
Q306 2SD601
Q307 2SC2404
Q308 2SD601
Q309 2SB709
Q310 2SC2404
Q311 2SC2404
Q312 2SC2404
Q313 2SD601
Q314 2SA1022
Q315 2SD601
Q316 2SC2404
Q317 2SD601
Q318 2SB709
Q319 2SD601
Q320 2SD601
Q120 2SB709
Q207 2SD601
D102 MA151K
D301 MA151K
X301 VSX0270
PR CAL BAL
PB CAL BAL
DEC'D PR LEV
DEC'D PB LEV
PR BLK LEV
PB BLK LEV
AXIS PHASE
BURST G POS
P333
PR (C) IN
GND
P908 · 7
P908 · 8
P908 · 9
P908 · 10
PB IN
JACK PANEL
VBK
SUB (1)
CBK · L
2/2
B/W ①
DEC'D PR
CLP'D PB
DEC'D PB
COMPONENT ①
P334
EE SC OUT
MOTHER
P312 · 1
P312 · 2
34A
35
VIDEO 3
SW301
SW302
SW303
SW304
REF SYNC
BURST GATE P
BURST DET N
LALT
SC
4 fSC
REF. NO. 3000 SERIES
9
10
11
12
13
14
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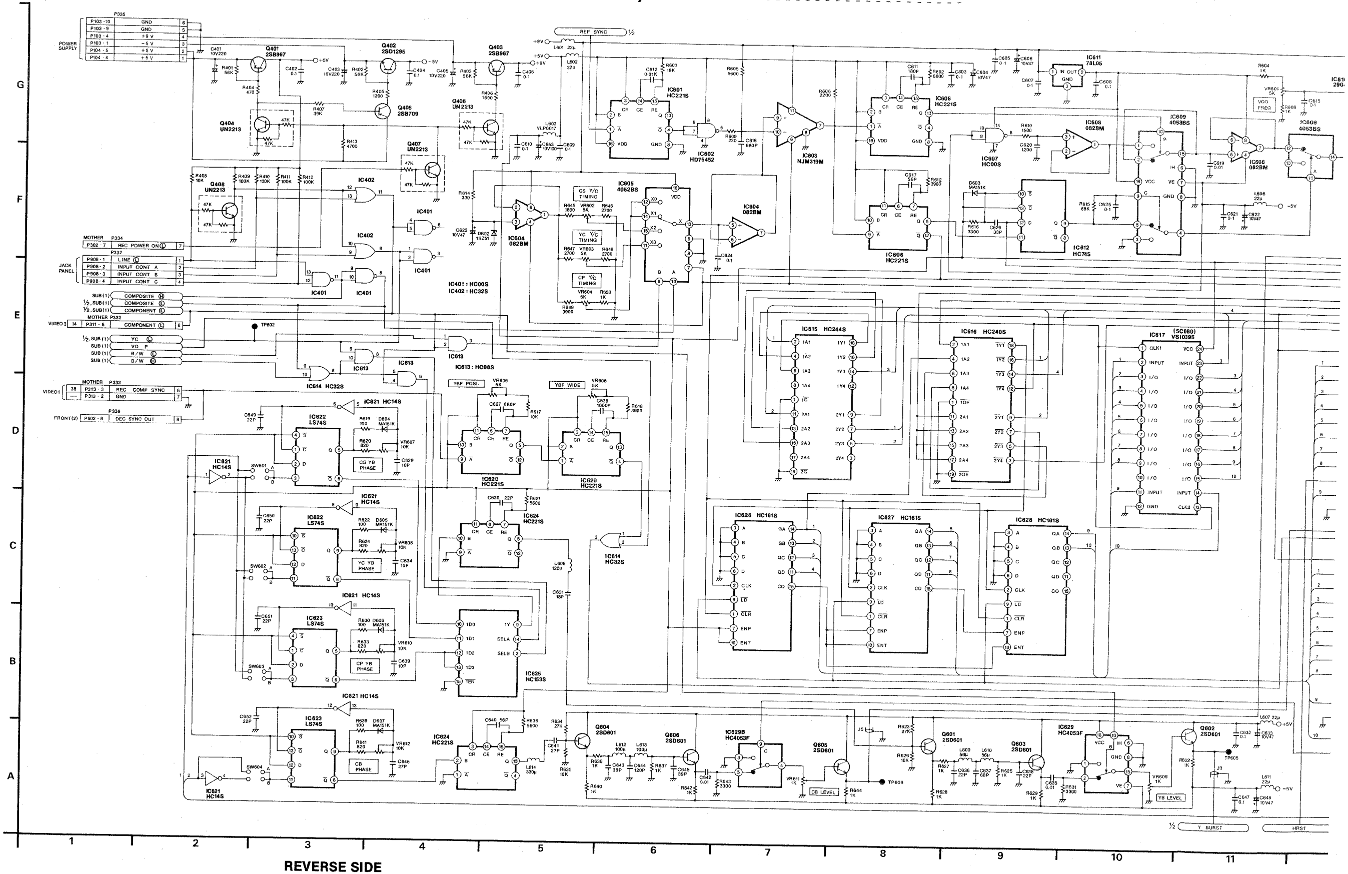
16
17
18

DECODER SCHEMATIC DIAGRAM (2/2) (FOR AU-520/S ONLY)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


P335
POWER SUPPLY
P103 · 10 GND
P103 · 9 GND
P103 · 4 +9 V
P103 · 1 −5 V
P104 · 5 +5 V
P104 · 4 +5 V
Q401 2SB967
Q402 2SD1295
Q403 2SB967
Q404 UN2213
Q405 2SB709
Q406 UN2213
Q407 UN2213
Q408 UN2213
IC402
IC401
IC401 : HC00S
IC402 : HC32S
MOTHER P334
P302 · 7 REC POWER ON Ⓛ
P332
JACK PANEL
P908 · 1 LINE Ⓛ
P908 · 2 INPUT CONT A
P908 · 3 INPUT CONT B
P908 · 4 INPUT CONT C
SUB(1) COMPOSITE Ⓗ
½,SUB(1) COMPOSITE Ⓛ
½,SUB(1) COMPONENT Ⓛ
MOTHER P332
VIDEO3
P311 · 6 COMPONENT Ⓛ
TP602
½,SUB(1) YC Ⓛ
SUB(1) VD P
SUB(1) B/W Ⓛ
SUB(1) B/W Ⓗ
IC613
IC613 : HC08S
IC614 HC32S
VIDEO1
P313 · 3 REC COMP SYNC
P313 · 2 GND
P336
FRONT(2)
P602 · 8 DEC SYNC OUT
REF SYNC
IC601 HC221S
IC602 HD75452
IC603 NJM319M
IC604 082BM
IC605 4052BS
CS Y/C TIMING
YC Y/C TIMING
CP Y/C TIMING
IC604 082BM
IC606 HC221S
IC607 HC00S
IC608 082BM
IC609 4053BS
IC611 78L05
IC612 HC74S
VCO FREQ
IC615 HC244S
IC616 HC240S
IC617 (5C060) VS10395
IC621 HC14S
IC622 LS74S
CS YB PHASE
YC YB PHASE
CP YB PHASE
CB PHASE
IC623 LS74S
IC620 HC221S
IC624 HC221S
IC614 HC32S
IC625 HC153S
YBF POSI.
YBF WIDE
IC626 HC161S
IC627 HC161S
IC628 HC161S
SW601
SW602
SW603
SW604
Q604 2SD601
Q606 2SD601
IC629B HC4053F
Q605 2SD601
CB LEVEL
TP606
Q601 2SD601
Q603 2SD601
IC629 HC4053F
YB LEVEL
Q602 2SD601
TP605
Y BURST
HRST
G
F
E
D
C
B
A
1
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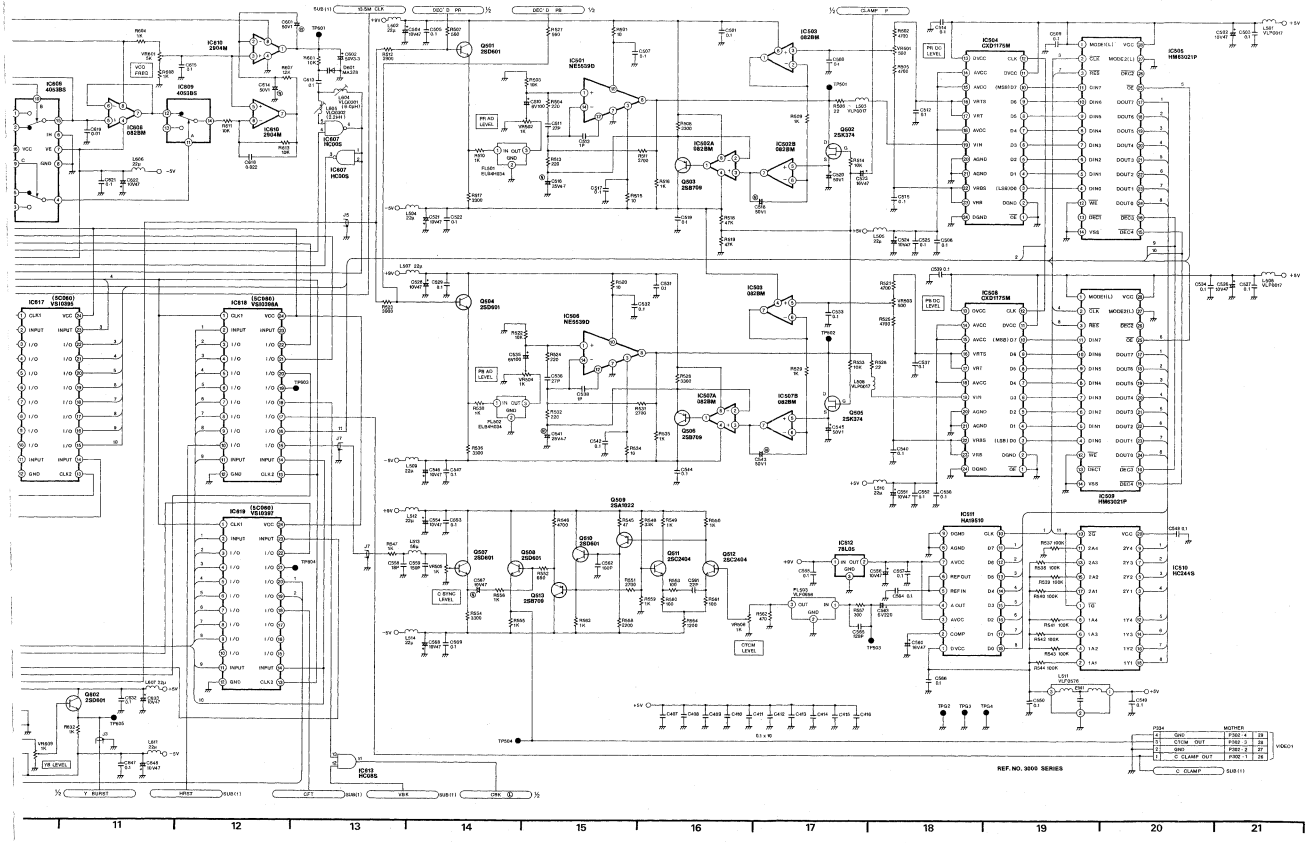
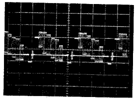
11

REVERSE SIDE

DECODER SCHEMATIC
DIAGRAM (1/2)


13.5M CLK
DEC'D PR
DEC'D PB
CLAMP P
IC609 4053BS
IC608 082BM
IC610 2904M
IC607 HC00S
D601 MA378
TP601
VCO FREQ
IC617 (5C060) VS10395
IC618 (5C060) VS10396A
IC619 (5C060) VS10397
Q501 2SD601
IC501 NE5539D
PR AD LEVEL
FL501 ELB4H034
IC502A 082BM
IC502B 082BM
Q502 2SK374
Q503 2SB709
IC503 082BM
TP501
PR DC LEVEL
IC504 CXD1175M
IC505 HM63021P
Q504 2SD601
IC506 NE5539D
PB AD LEVEL
FL502 ELB4H034
IC507A 082BM
IC507B 082BM
Q505 2SK374
Q506 2SB709
TP502
PB DC LEVEL
IC508 CXD1175M
IC509 HM63021P
TP603
TP604
Q507 2SD601
Q508 2SD601
Q509 2SA1022
Q510 2SD601
Q511 2SC2404
Q512 2SC2404
Q513 2SB709
C SYNC LEVEL
CTCM LEVEL
FL503 VLF0656
IC512 78L05
IC511 HA19510
IC510 HC244S
TP503
TPG2
TPG3
TPG4
L511 VLF0576
EMI
0.1 x 10
Q602 2SD601
TP605
YB LEVEL
TP504
IC613 HC08S
Y BURST
HRST
CFT
VBK
CBK
SUB(1)
P334
MOTHER
4 GND P302-4 29
3 CTCM OUT P302-3 28
2 GND P302-2 27
1 C CLAMP OUT P302-1 26
VIDEO1
C CLAMP
REF. NO. 3000 SERIES
11
12
13
14
15
16
17
18
19
20
21

DECODER WAVEFORMS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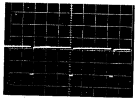
TP104
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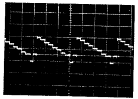
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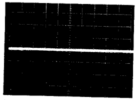
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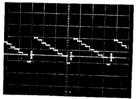
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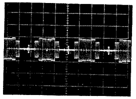
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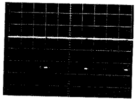
TP206
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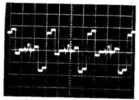
TP303
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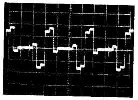
TP304
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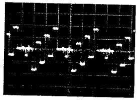
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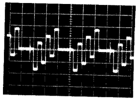
TP307
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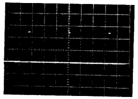
TP308
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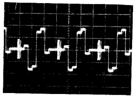
TP501
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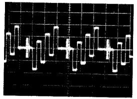
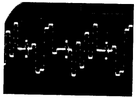

TP502
0.5V/20μsec. div.


TP503
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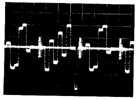
TP504
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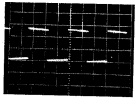
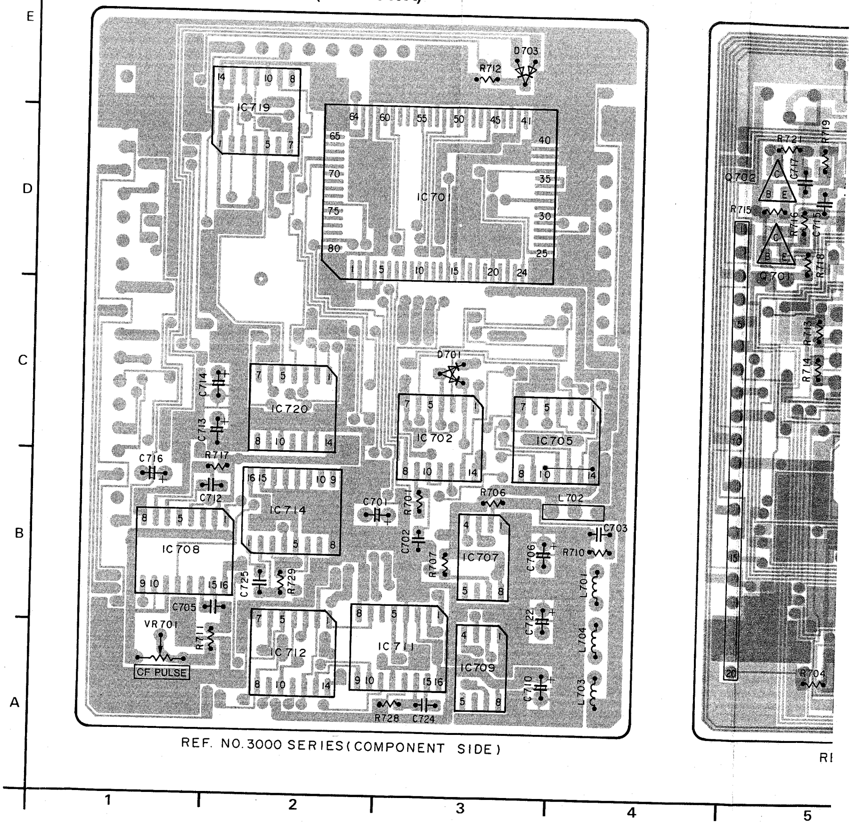

TP701
2V/50msec. div.

DECODER SUB (1) P.C.B.	
Transistors	
Q701	D-5
Q702	D-5
Integrated Circuits	
IC701	D-3
IC702	C-3
IC703	C-6
IC704	C-7
IC705	C-4
IC706	D-7
IC707	B-3
IC708	B-1
IC709	A-3
IC710	E-6
IC711	A-3
IC712	A-2
IC713	E-5
IC714	B-2
IC715	A-7
IC716	C-5
IC717	A-6
IC718	A-5
IC719	D-2
IC720	C-2
Adjustments	
VR701	A-1

ADDRESS INFORMATION

DECODER SUB (1) P.C. BOARD (VEP88049A) (FOR AU-520/S ONLY)

DECODER SUB (1) P.C.B. (VEP88049A)


E
D
C
B
A
1
2
3
4
5
IC701
IC702
IC705
IC707
IC708
IC709
IC711
IC712
IC714
IC719
IC720
D701
D703
R701
R704
R706
R707
R710
R711
R712
R713
R714
R715
R716
R717
R718
R719
R721
R728
R729
C701
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C703
C705
C706
C710
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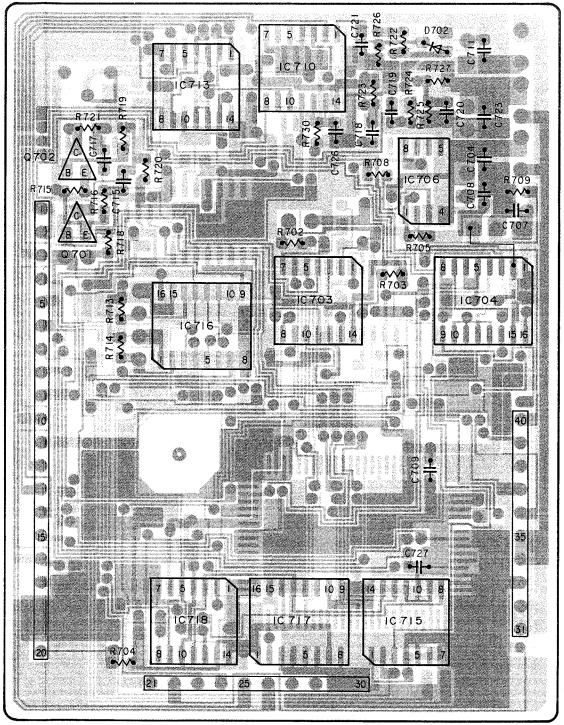
C713
C714
C715
C716
C717
C722
C724
C725
L701
L702
L703
L704
Q701
Q702
VR701
CF PULSE
REF. NO.3000 SERIES(COMPONENT SIDE)

NLY)

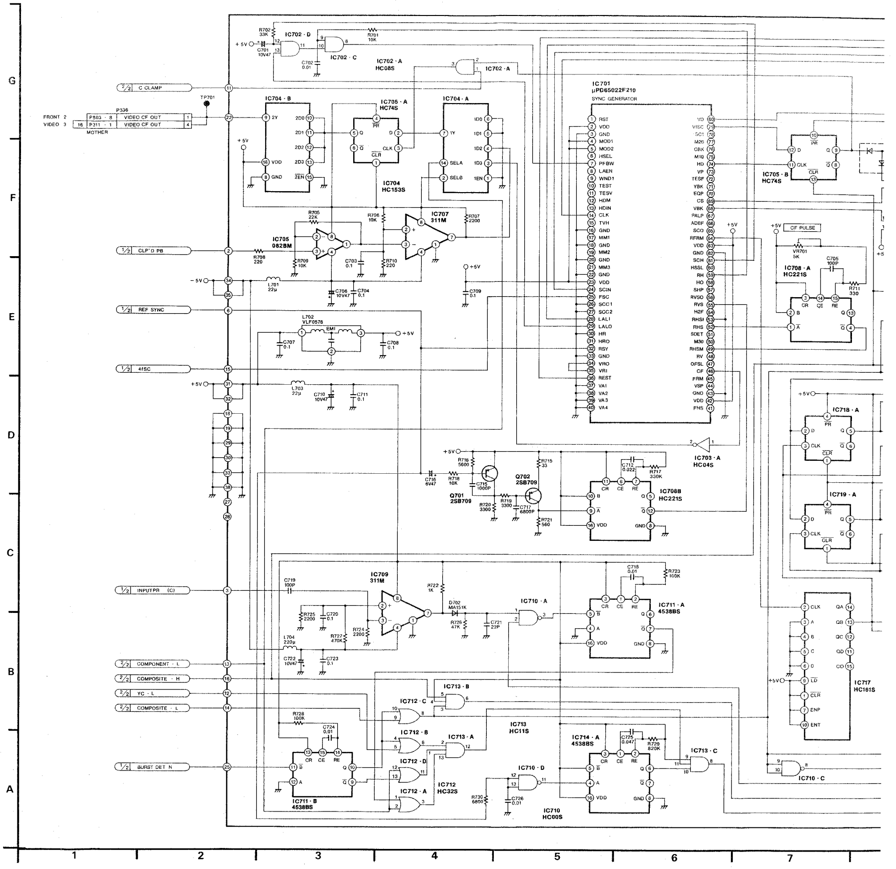
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


IC713
IC710
IC706
IC703
IC704
IC716
IC718
IC717
IC715
Q702
Q701
D702
R715
R716
R718
R719
R720
R721
R702
R703
R704
R705
R708
R709
R713
R714
R722
R723
R724
R725
R726
R727
R730
C704
C707
C708
C709
C711
C715
C717
C718
C719
C720
C721
C726
C727
1
5
10
15
20
21
25
30
31
35
40

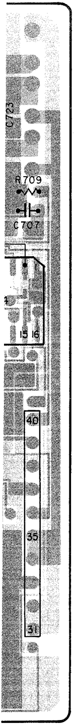
REF. NO. 3000 SERIES (FOIL SIDE)

5 6 7

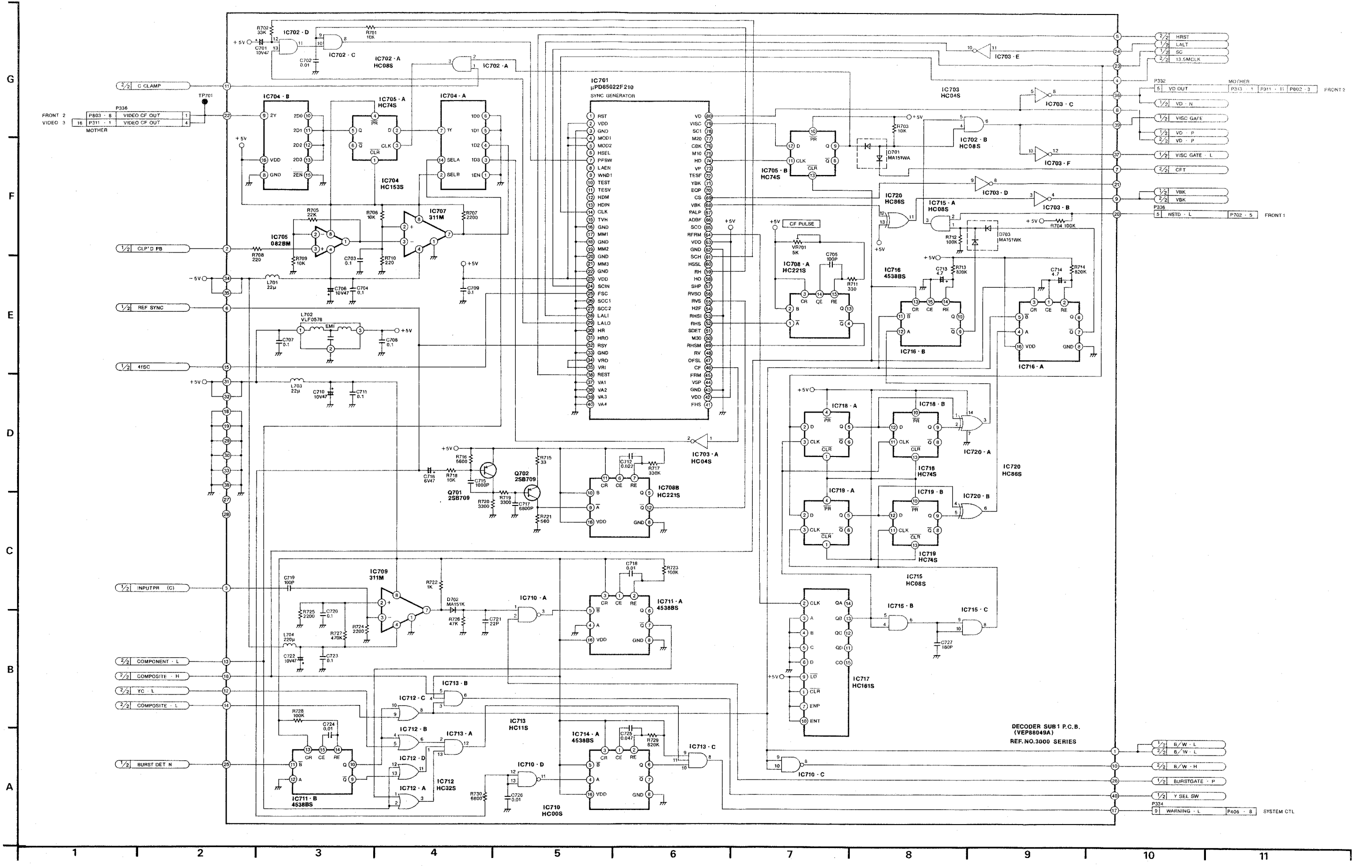
DECODER SUB (1) SCHEMATIC DIAGRAM (FOR AU-520/S ONLY)


G
F
E
D
C
B
A
1
2
3
4
5
6
7
C CLAMP
FRONT 2
VIDEO 3
P336
P803 · 8
P311 · 1
VIDEO CF OUT
MOTHER
TP701
CLP'D PB
REF SYNC
4fSC
INPUTPR (C)
COMPONENT · L
COMPOSITE · H
YC · L
COMPOSITE · L
BURST DET N
+5V
−5V
IC701
μPD65022F210
SYNC GENERATOR
IC702 · D
IC702 · C
IC702 · A
HC08S
IC704 · B
IC704 · A
IC704
HC153S
IC705 · A
HC74S
IC705 · B
HC74S
IC705
082BM
IC707
311M
IC709
311M
IC703 · A
HC04S
IC708 · A
HC221S
IC708B
HC221S
IC710 · A
IC710 · C
IC710 · D
IC710
HC00S
IC711 · A
4538BS
IC711 · B
4538BS
IC712 · A
IC712 · B
IC712 · C
IC712 · D
IC712
HC32S
IC713 · A
IC713 · B
IC713 · C
IC713
HC11S
IC714 · A
4538BS
IC717
HC161S
IC718 · A
IC719 · A
Q701
2SB709
Q702
2SB709
D702
MA151K
L701
22μ
L702
VLF0576
L703
22μ
L704
220μ
VR701
5K
CF PULSE

& AU-520
NLY


C723
R709
C707
15 16
40
35
31

DECODER SUB (1) SCHEMATIC DIAGRAM (FOR AU-520/S ONLY)

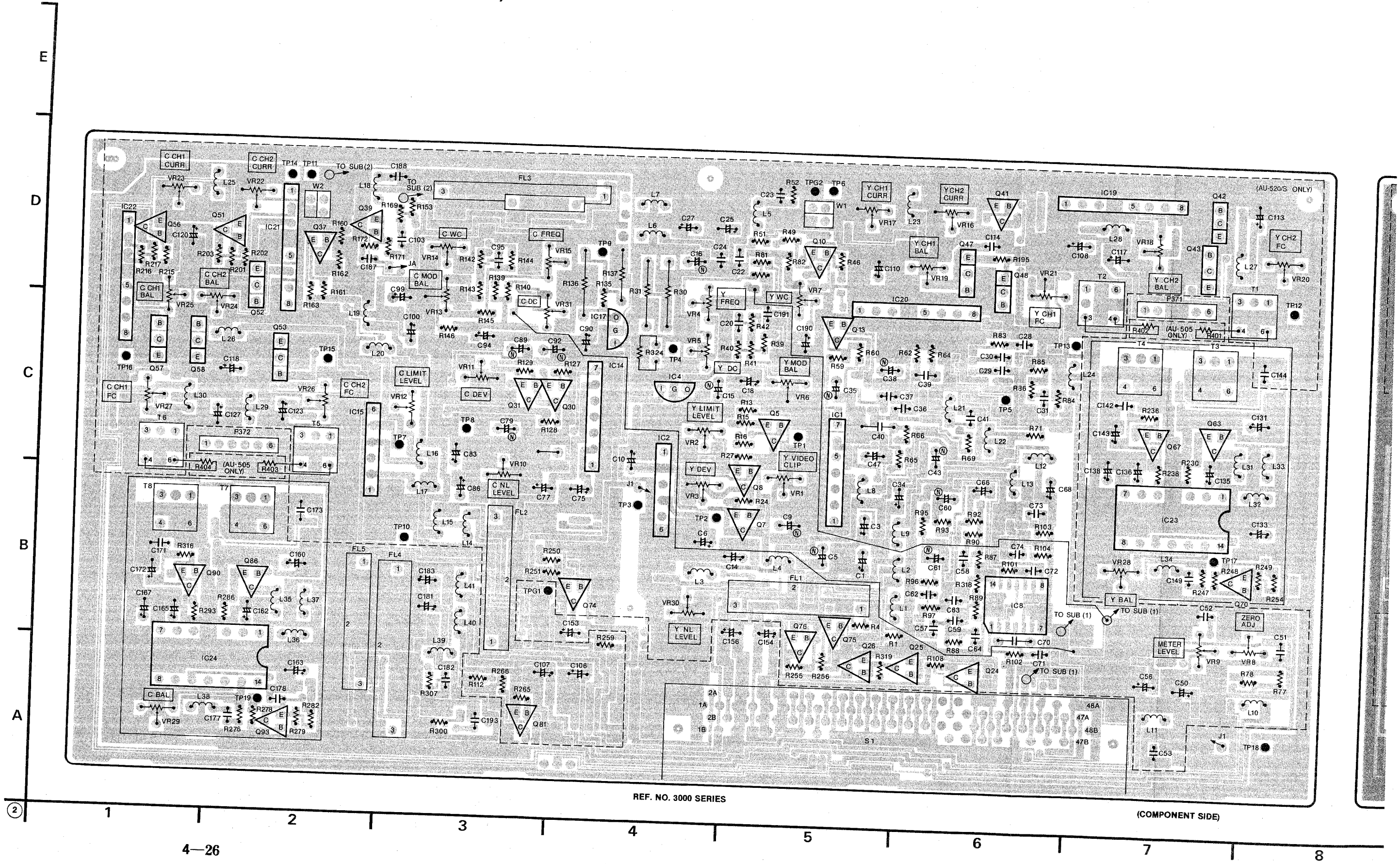

G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
IC701
μPD65022F210
SYNC GENERATOR
IC702 · A
IC702 · B
IC702 · C
IC702 · D
HC08S
IC703
HC04S
IC703 · A
IC703 · B
IC703 · C
IC703 · D
IC703 · E
IC703 · F
IC704 · A
IC704 · B
IC704
HC153S
IC705 · A
IC705 · B
HC74S
IC705
082BM
IC707
311M
IC708 · A
HC221S
IC708B
HC221S
IC709
311M
IC710 · A
IC710 · C
IC710 · D
IC710
HC00S
IC711 · A
4538BS
IC711 · B
4538BS
IC712 · A
IC712 · B
IC712 · C
IC712 · D
IC712
HC32S
IC713 · A
IC713 · B
IC713 · C
IC713
HC11S
IC714 · A
4538BS
IC715 · A
IC715 · B
IC715 · C
IC715
HC08S
IC716 · A
IC716 · B
IC716
4538BS
IC717
HC161S
IC718 · A
IC718 · B
IC718
HC74S
IC719 · A
IC719 · B
IC719
HC74S
IC720 · A
IC720 · B
IC720
HC86S
Q701
2SB709
Q702
2SB709
D701
MA151WA
D702
MA151K
D703
MA151WK
L701
22μ
L702
VLF0576
L703
22μ
L704
220μ
VR701
5K
TP701
C CLAMP
CLP'D PB
REF SYNC
4fSC
INPUTPR (C)
COMPONENT · L
COMPOSITE · H
YC · L
COMPOSITE · L
BURST DET N
FRONT 2
VIDEO 3
P336
P803 · 8
P311 · 1
VIDEO CF OUT
MOTHER
HRST
LALT
SC
13.5MCLK
P332
VD OUT
P313 · 1
P311 · 11
P802 · 3
FRONT 2
VD · N
VISC GATE
VD · P
VISC GATE · L
CFT
VBK
NSTD · L
P702 · 5
FRONT 1
CF PULSE
B/W · L
B/W · H
BURSTGATE · P
Y SEL SW
P334
WARNING · L
P406 · 8
SYSTEM CTL
+5V
-5V
DECODER SUB1 P.C.B.
(VEP88049A)
REF.NO.3000 SERIES

REVERSE SIDE

VIDEO 1 P.C.B.

VIDEO 1 P.C. BOARD (VEP83076A) (FOR AU-520/S)
(VEP83076B) (FOR AU-505)

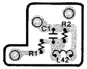
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY



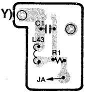
E
D
C
B
A
②
1
2
3
4
5
6
7
8
C CH1 CURR
C CH2 CURR
TO SUB (2)
FL3
IC22
IC21
IC19
IC20
IC17
IC14
IC4
IC2
IC1
IC15
IC23
IC24
IC8
Y CH1 CURR
Y CH2 CURR
(AU-520/S ONLY)
Y CH2 FC
C WC
C FREQ
C MOD BAL
C DC
C CH2 BAL
C CH1 BAL
C CH1 FC
C CH2 FC
C LIMIT LEVEL
C DEV
C NL LEVEL
Y FREQ
Y WC
Y CH1 BAL
Y CH2 BAL
Y CH1 FC
Y DC
Y MOD BAL
Y LIMIT LEVEL
Y DEV
Y VIDEO CLIP
Y NL LEVEL
Y BAL
C BAL
METER LEVEL
ZERO ADJ
TO SUB (1)
(AU-505 ONLY)
FL1
FL2
FL4
FL5
S1
J1
REF. NO. 3000 SERIES
(COMPONENT SIDE)

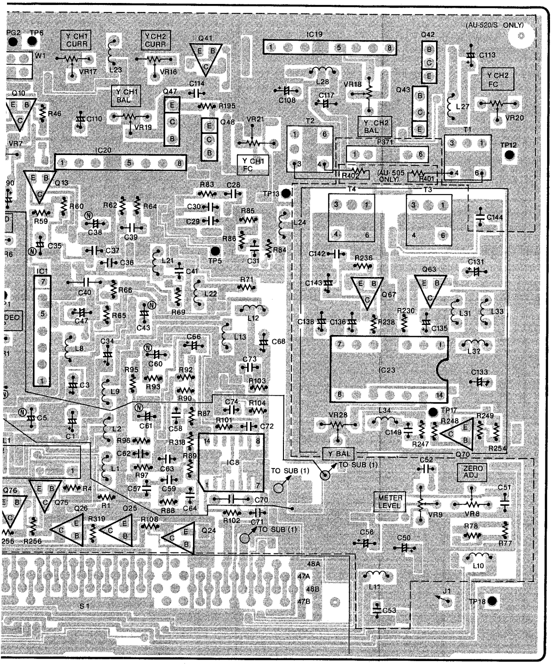
20S & AU-520
05 ONLY

VIDEO 1 SUB (1) P.C.B. (VEP83101A)
(PART OF VEP83076A) (FOR AU-520/S ONLY)

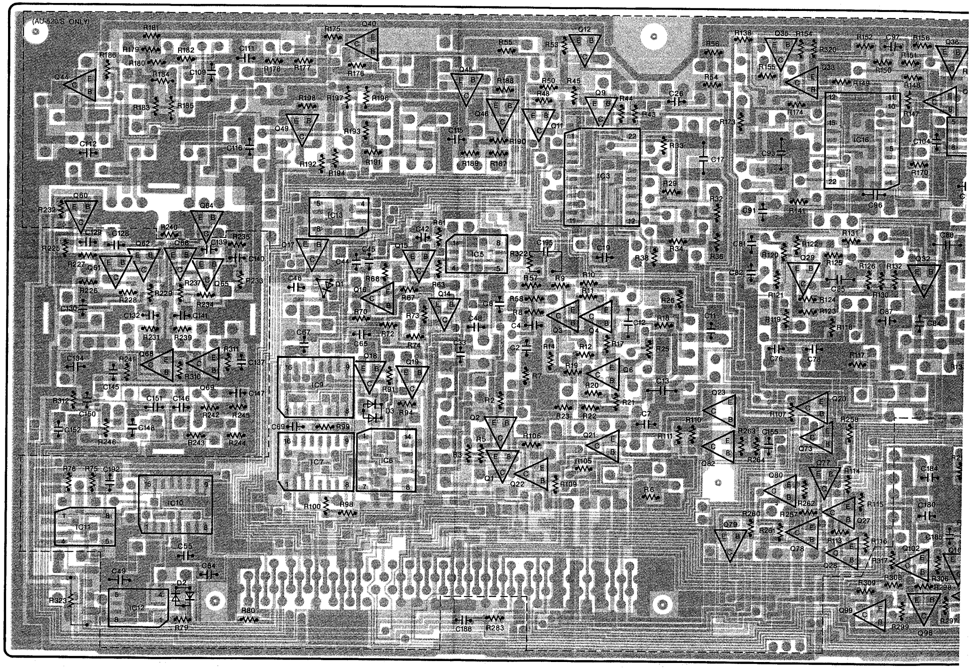


VIDEO 1 SUB (2) P.C.B. (VEP83102A)
(PART OF VEP83076A) (FOR AU-520/S ONLY)




(AU-520/S ONLY)
Y CH1 CURR
Y CH2 CURR
Y CH1 BAL
Y CH2 BAL
Y CH1 FC
Y CH2 FC
IC19
IC20
IC1
IC8
IC23
T1
T2
T3
T4
(AU-505 ONLY)
TO SUB (1)
Y BAL
ZERO ADJ
METER LEVEL
VR8
VR9
VR17
VR18
VR19
VR20
VR21
VR28
TP5
TP6
TP12
TP13
TP17
TP18
S1

(COMPONENT SIDE)

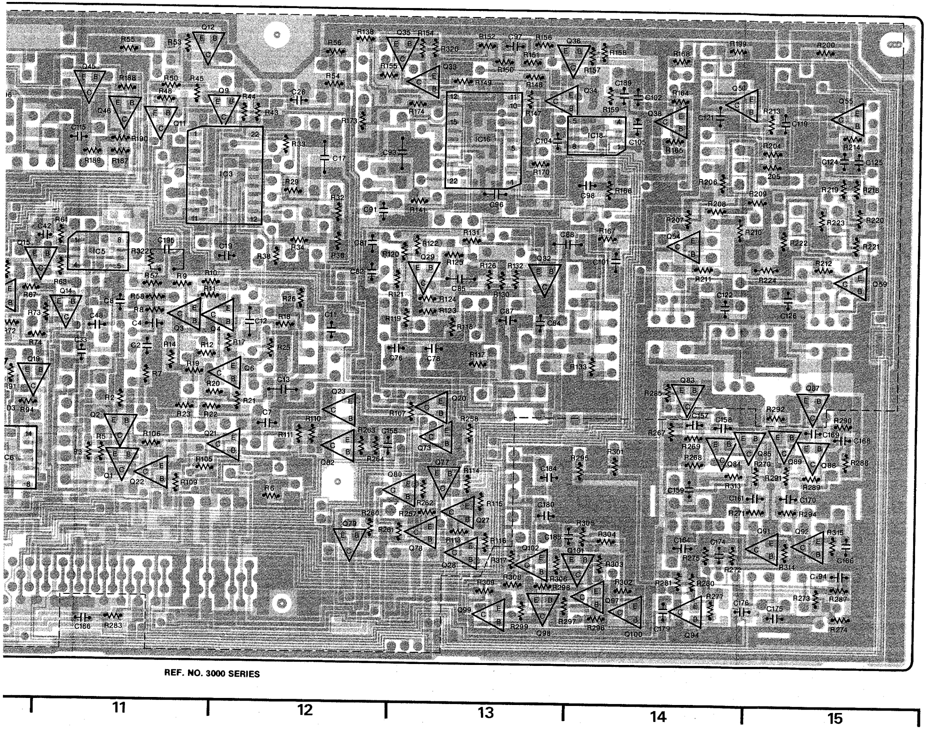

(AU-520/S ONLY)
IC3
IC5
IC6
IC7
IC9
IC10
IC11
IC12
IC13
IC16
D1
D2
D3

(FOIL SIDE)

REF. NO. 3000 SERIES

5 6 7 8 9 10 11 12 13

(2) P.C.B. (VEP83102A)
EP83076A) (FOR AU-520/S ONLY)


Q12
Q35
Q36
Q45
Q46
Q11
Q9
Q39
Q34
IC3
IC16
IC18
Q38
Q50
Q55
IC5
Q15
Q14
Q3
Q4
Q29
Q32
Q54
Q59
Q19
Q6
Q2
Q1
Q22
Q21
Q23
Q20
Q73
Q82
Q77
Q80
Q27
Q78
Q79
Q28
Q83
Q87
Q84
Q85
Q89
Q88
Q91
Q92
Q102
Q101
Q99
Q98
Q97
Q100
Q94
11
12
13
14
15

REF. NO. 3000 SERIES

VIDEO 1 P.C.B.

Transistors

Q3001	B-11
Q3002	B-11
Q3003	C-12
Q3004	C-12
Q3005	C-5
Q3006	B-12
Q3007	B-5
Q3008	B-5
Q3009	D-12
Q3010	D-5
Q3011	D-11
Q3012	D-11
Q3013	C-5
Q3014	C-11
Q3015	C-10
Q3016	C-10
Q3017	C-10
Q3018	B-10
Q3019	B-10
Q3020	B-13
Q3021	B-12
Q3022	B-11
Q3023	B-12
Q3024	A-6
Q3025	B-6
Q3026	B-5
Q3027	B-13
Q3028	A-13
Q3029	C-13
Q3030	C-3
Q3031	C-3
Q3032	C-13
Q3033	D-13
Q3034	D-14
Q3035	D-13
Q3036	D-13
Q3037	D-2
Q3038	D-14
Q3039	D-2
Q3040	D-10
Q3041	D-6
Q3042	D-7
Q3043	D-7
Q3044	D-9
Q3045	D-11
Q3046	D-11
Q3047	D-6
Q3048	D-6
Q3049	D-10
Q3050	D-14
Q3051	D-2
Q3052	C-2
Q3053	C-2
Q3054	C-14
Q3055	D-15
Q3056	D-1
Q3057	C-1
Q3058	C-1
Q3059	C-15
Q3060	C-9
Q3061	C-9
Q3062	C-9
Q3063	C-7
Q3064	C-9
Q3065	C-9
Q3066	C-9
Q3067	C-7
Q3068	B-9
Q3069	B-9
Q3070	B-7
Q3073	B-13
Q3074	B-4
Q3075	B-5
Q3076	B-5
Q3077	B-13
Q3078	A-13
Q3079	A-12
Q3080	B-13
Q3081	A-3
Q3082	B-12
Q3083	B-14
Q3084	B-14
Q3085	B-15
Q3086	B-2
Q3087	B-15
Q3088	B-15
Q3089	B-15
Q3090	B-1
Q3091	A-15
Q3092	A-15
Q3093	A-2
Q3094	A-14
Q3097	A-14
Q3098	A-13
Q3099	A-13
Q3100	A-14
Q3101	A-14
Q3102	A-13

Integrated Circuits

IC3001	C-5
IC3002	C-4
IC3003	C-12
IC3004	C-4
IC3005	C-11
IC3006	B-10
IC3007	B-10
IC3008	B-6
IC3009	B-10
IC3010	B-9
IC3011	A-9
IC3012	A-9
IC3013	C-10
IC3014	C-4
IC3015	C-2
IC3016	D-13
IC3017	C-4
IC3018	D-14
IC3019	D-7
IC3020	D-6
IC3021	D-2
IC3022	D-1
IC3023	B-7
IC3024	A-1

Test Points

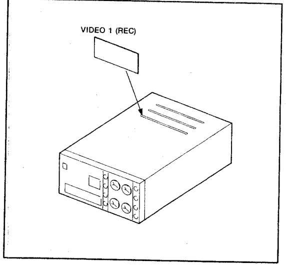
TP3001	C-5
TP3002	B-4
TP3003	B-4
TP3004	C-4
TP3005	C-6
TP3006	D-5
TP3007	C-3
TP3008	C-3
TP3009	D-4
TP3010	B-3
TP3011	D-2
TP3012	D-8
TP3013	C-6
TP3014	D-2
TP3015	C-2
TP3016	C-1
TP3017	B-7
TP3018	A-8
TP3019	A-2
TPG3001	B-3
TPG3002	D-5

Adjustments

VR3001	B-5
VR3002	C-4
VR3003	B-4
VR3004	C-4
VR3005	C-4
VR3006	C-5
VR3007	D-5
VR3008	B-8
VR3009	B-7
VR3010	C-3
VR3011	C-3
VR3012	C-3
VR3013	C-3
VR3014	D-3
VR3015	D-3
VR3016	D-6
VR3017	D-5
VR3018	D-7
VR3019	D-6
VR3020	D-8
VR3021	D-6
VR3022	D-2
VR3023	D-1
VR3024	C-1
VR3025	C-1
VR3026	C-2
VR3027	C-1
VR3028	B-7
VR3029	A-1
VR3030	B-4
VR3031	C-3

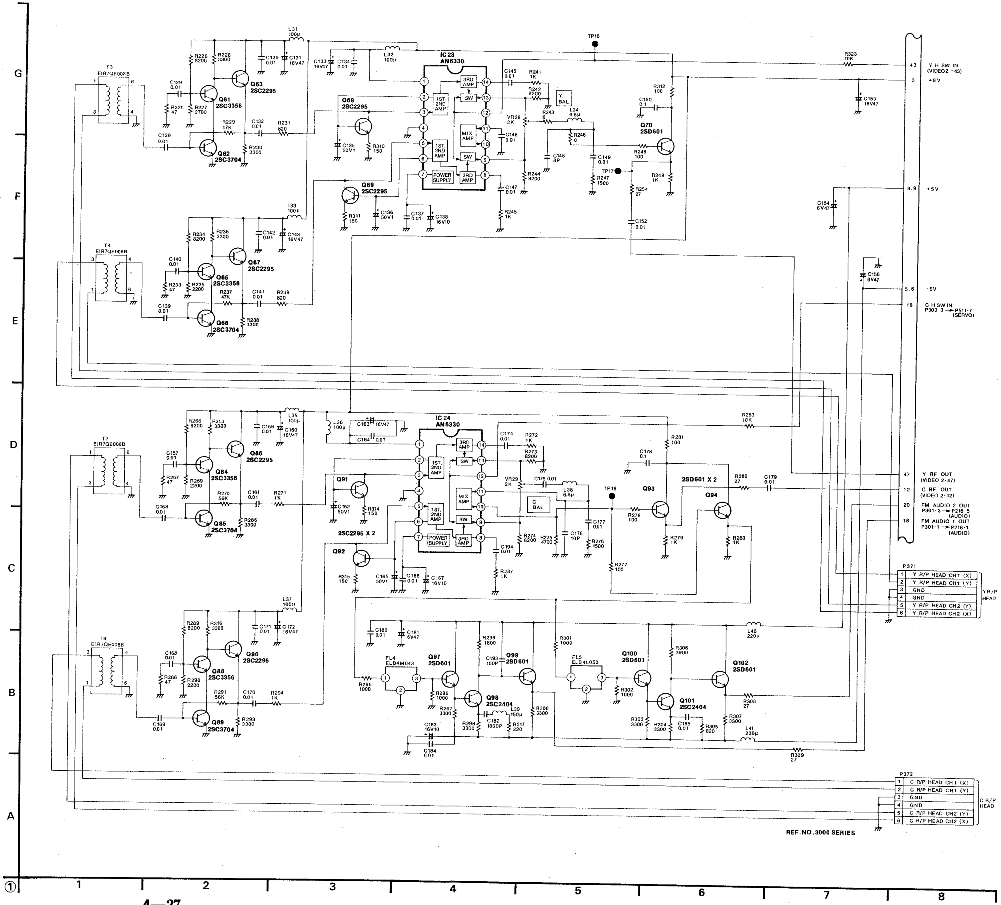
ADDRESS INFORMATION

P.C. BOARD LOCATION



VIDEO 1 SCHEMATIC DIAGRAM (FOR AU-505)

Effective from
Serial No. H9TNA0128 (FOR AU-505)


G
F
E
D
C
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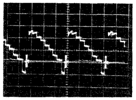
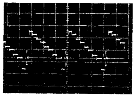
A
①
1
2
3
4
5
6
7
8
T3 EIR7QE008B
T4 EIR7QE008B
T7 EIR7QE008B
T8 EIR7QE008B
Q61 2SC3356
Q62 2SC3704
Q63 2SC2295
Q65 2SC3356
Q66 2SC3704
Q67 2SC2295
Q68 2SC2295
Q69 2SC2295
Q70 2SD601
Q84 2SC3356
Q85 2SC3704
Q86 2SC2295
Q88 2SC3356
Q89 2SC3704
Q90 2SC2295
Q91
Q92
2SC2295 X 2
Q93
Q94
2SD601 X 2
Q97 2SD601
Q98 2SC2404
Q99 2SD601
Q100 2SD601
Q101 2SC2404
Q102 2SD601
IC23 AN6330
IC 24 AN6330
3RD AMP
1ST. 2ND AMP
SW
MIX AMP
POWER SUPPLY
Y. BAL
C BAL
TP17
TP18
TP19
VR28 2K
VR29 2K
L31 100μ
L32 100μ
L33 100μ
L34 6.8μ
L35 100μ
L36 100μ
L37 100μ
L38 6.8μ
L39 150μ
L40 220μ
L41 220μ
FL4 ELB4M043
FL5 ELB4L053
R323 10K
R283 10K
C153 16V47
C154 6V47
C156 6V47
43 Y H SW IN (VIDEO2 -43)
3 +9 V
8.9 +5 V
5.6 -5V
16 C H SW IN P303-3 → P511-7 (SERVO)
47 Y RF OUT (VIDEO 2-47)
12 C RF OUT (VIDEO 2-12)
20 FM AUDIO 2 OUT P301-3 → P216-5 (AUDIO)
18 FM AUDIO 1 OUT P301-1 → P216-1 (AUDIO)
P371
1 Y R/P HEAD CH1 (X)
2 Y R/P HEAD CH1 (Y)
3 GND
4 GND
5 Y R/P HEAD CH2 (Y)
6 Y R/P HEAD CH2 (X)
Y R/P HEAD
P372
1 C R/P HEAD CH1 (X)
2 C R/P HEAD CH1 (Y)
3 GND
4 GND
5 C R/P HEAD CH2 (Y)
6 C R/P HEAD CH2 (X)
C R/P HEAD
REF.NO.3000 SERIES

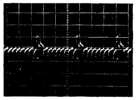
VIDEO 1 (REC) WAVEFORMS



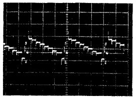
TP1
0.5V/20μsec. div.



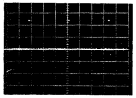
TP2
0.5V/20μsec. div.



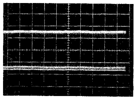
TP3
0.2V/20μsec. div.



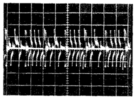
TP4
0.2V/20μsec. div.



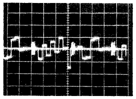
TP5
2V/20μsec. div.



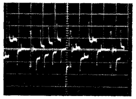
TP6
0.2V/10μsec. div.



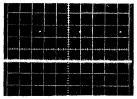
TP7
0.1V/20μsec. div.



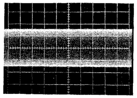
TP8
0.5V/10μsec. div.



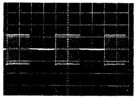
TP9
0.1V/10μsec. div.



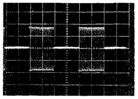
TP10
2V/20μsec. div.



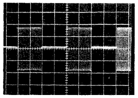
TP11
0.2V/10msec. div.



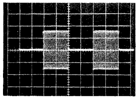
TP12
2V/10msec. div.



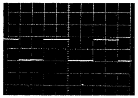
TP13
2V/10msec. div.



TP15
1V/10msec. div.



TP16
1V/10msec. div.

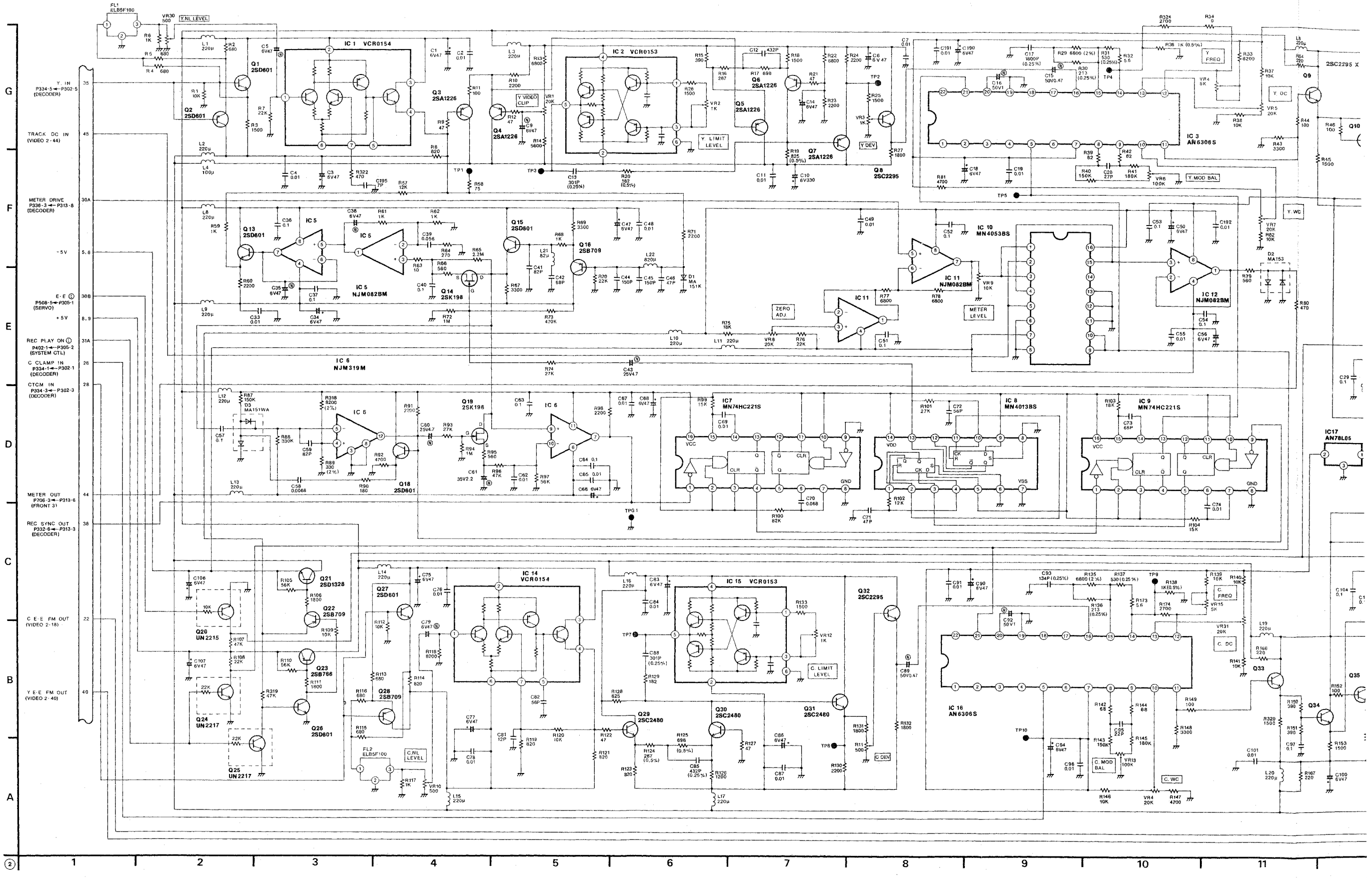


TP18
0.5V/10msec. div.

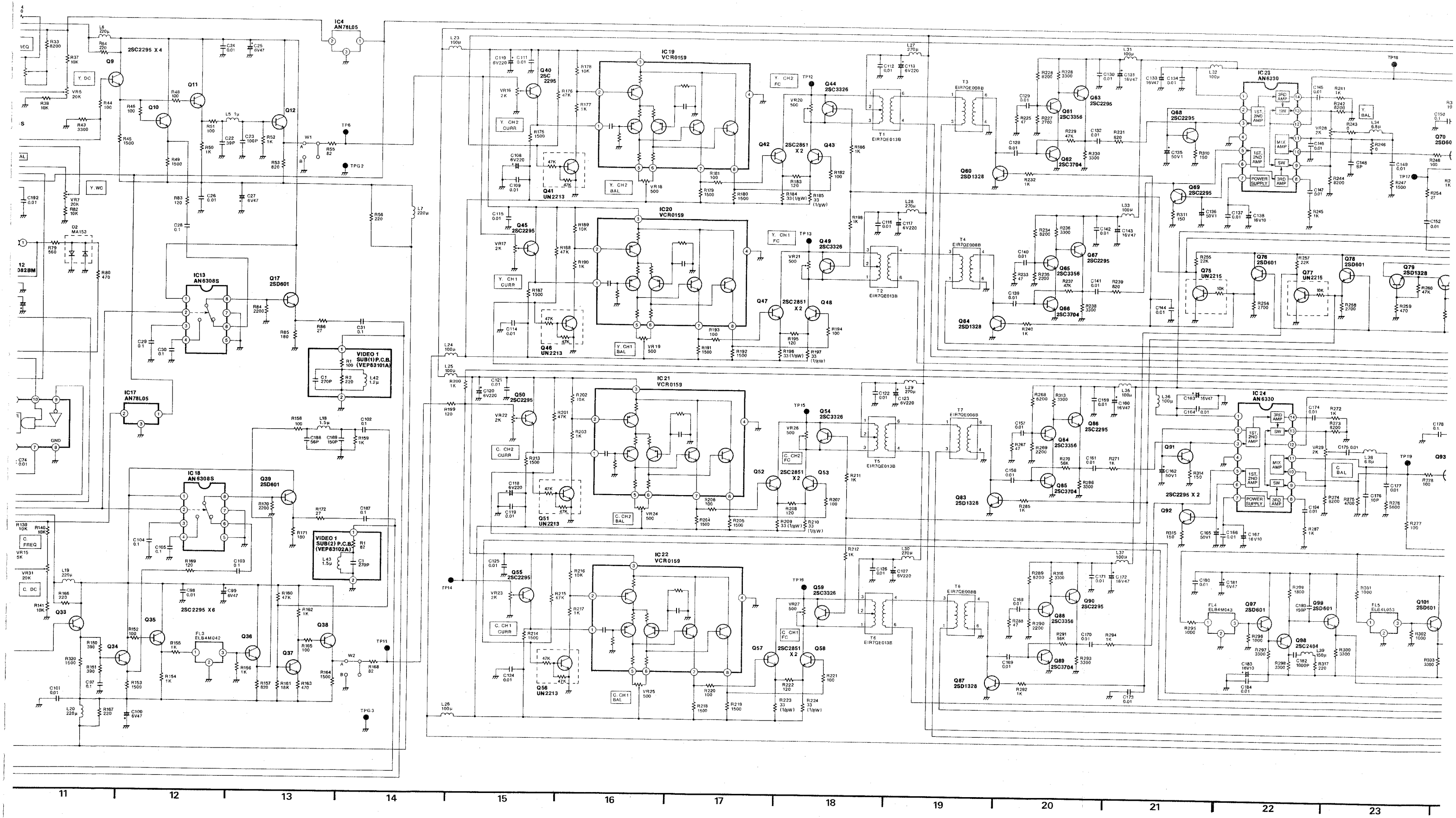
REVERSE SIDE
VIDEO 1
SCHEMATIC DIAGRAM

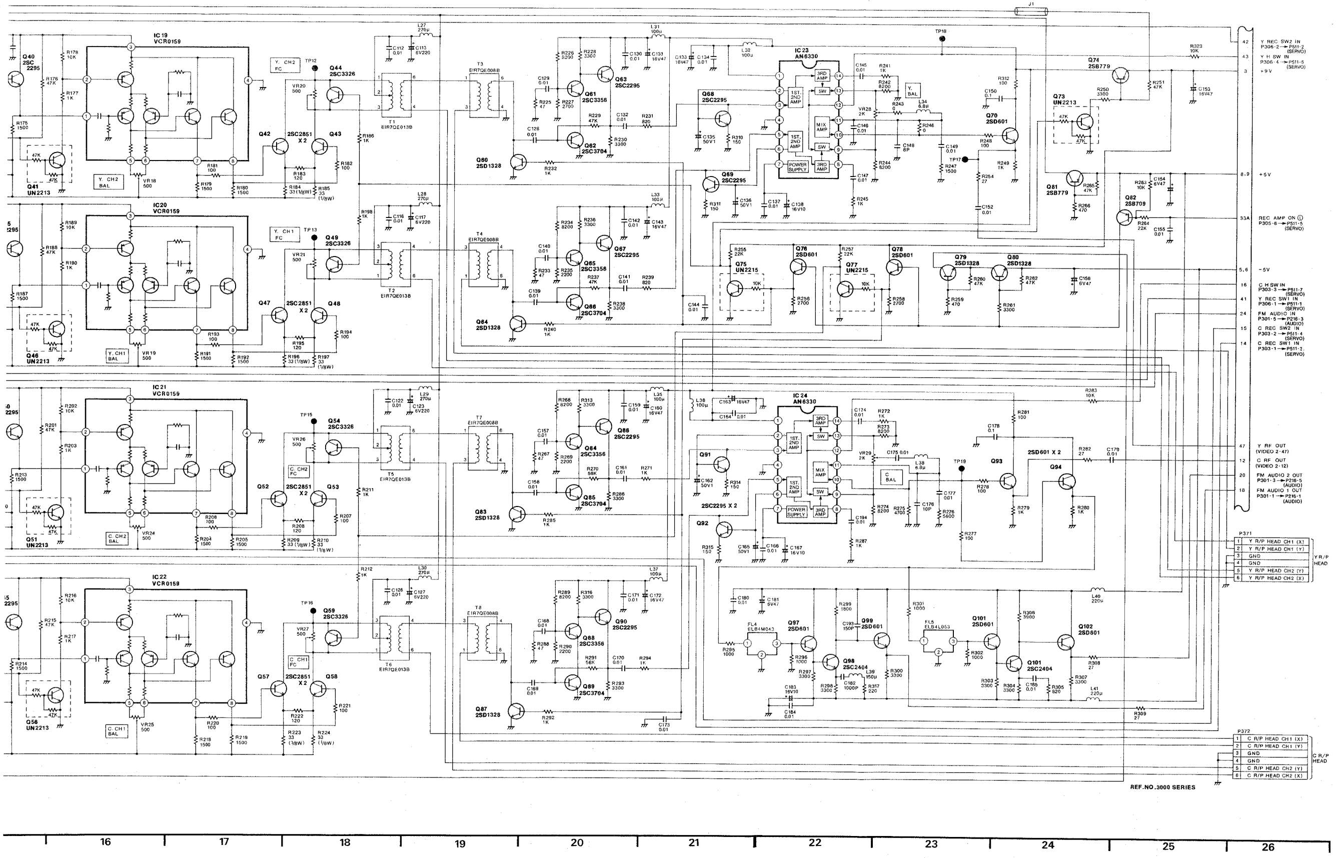
VIDEO 1 SCHEMATIC DIAGRAM (FOR AU-520/S)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY



G
F
E
D
C
B
A
Y IN P334-5→P302-5 (DECODER)
TRACK DC IN (VIDEO 2-44)
METER DRIVE P336-3→P313-8 (DECODER)
+5V
E-E Ⓛ P508-5→P305-1 (SERVO)
+5V
REC PLAY ON Ⓛ P402-1→P305-2 (SYSTEM CTL)
C CLAMP IN P334-1→P302-1 (DECODER)
CTCM IN P334-3→P302-3 (DECODER)
METER OUT P706-3→P313-6 (FRONT 3)
REC SYNC OUT P332-6→P313-3 (DECODER)
C E-E FM OUT (VIDEO 2-18)
Y E-E FM OUT (VIDEO 2-40)
FL1 ELB5F100
VR30 500
Y.NL.LEVEL
IC 1 VCR0154
IC 2 VCR0153
IC 3 AN6306S
IC 5 NJM082BM
IC 6 NJM319M
IC7 MN74HC221S
IC 8 MN4013BS
IC 9 MN74HC221S
IC 10 MN4053BS
IC 11 NJM082BM
IC 12 NJM082BM
IC 14 VCR0154
IC 15 VCR0153
IC 16 AN6306S
IC17 AN78L05
Q1 2SD601
Q2 2SD601
Q3 2SA1226
Q4 2SA1226
Q5 2SA1226
Q6 2SA1226
Q7 2SA1226
Q8 2SC2295
Q9 2SC2295
Q13 2SD601
Q14 2SK198
Q15 2SD601
Q16 2SB709
Q18 2SD601
Q19 2SK198
Q20 UN2215
Q21 2SD1328
Q22 2SB709
Q23 2SB766
Q24 UN2217
Q25 UN2217
Q26 2SD601
Q27 2SD601
Q28 2SB709
Q29 2SC2480
Q30 2SC2480
Q31 2SC2480
Q32 2SC2295
Y VIDEO CLIP
Y LIMIT LEVEL
Y DEV
Y FREQ
Y DC
Y MOD BAL
Y WC
ZERO ADJ
METER LEVEL
C.NL LEVEL
C LIMIT LEVEL
C DEV
C FREQ
C DC
C MOD BAL
C WC
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TPG 1
FL2 ELB5F100
D1 MA151K
D2 MA153
D3 MA151WA
1
2
3
4
5
6
7
8
9
10
11


IC4
AN78L05
2SC2295 X 4
Q9
Q10
Q11
Q12
Y. DC
VR5
20K
R33
8200
R37
10K
R38
10K
R43
3300
L6
220μ
R54
220
R44
100
R45
100
R45
1500
R48
100
R49
1500
R50
1K
R51
100
L5 1μ
C22
39P
C23
100P
R52
1K
R53
820
C24
0.01
C25
6V47
W1
R55
82
TP6
TPG2
Y. WC
VR7
20K
R82
10K
C192
0.01
R83
120
C26
0.01
C27
6V47
C28
0.1
R56
220
L7
220μ
D2
MA153
R79
560
R80
470
IC13
AN6308S
Q17
2SD601
R84
2200
R85
180
R86
27
C31
0.1
C29
0.1
C30
0.1
VIDEO 1
SUB(1) P.C.B.
(VEP83101A)
R1
100
R2
220
C1
270P
L42
1.2μ
IC17
AN78L05
GND
C74
0.01
R158
100
L18
1.5μ
C102
0.1
C188
56P
C169
150P
R159
1K
IC18
AN6308S
Q39
2SD601
R170
2200
R172
27
C187
0.1
R171
180
VIDEO 1
SUB(2) P.C.B.
(VEP83102A)
R1
82
C1
270P
L43
1.5μ
C104
0.1
C105
0.1
R169
120
C103
0.1
R130
10K
R140
10K
C FREQ
VR15
5K
VR31
20K
C. DC
R141
10K
L19
220μ
R166
220
Q33
Q34
Q35
Q36
Q37
Q38
C98
0.01
C99
6V47
2SC2295 X6
R152
100
R150
390
R151
390
C97
0.1
R320
1500
R153
1500
C100
6V47
R155
1K
FL3
ELB4M042
R154
1K
R156
1K
R157
820
R160
47K
R162
1K
R165
100
R161
18K
R163
470
R164
1500
W2
R168
82
TP11
TPG3
C101
0.01
L20
220μ
R167
220
L23
100μ
C110
6V220
C111
0.01
Q40
2SC
2295
VR16
2K
R176
47K
R178
10K
R177
1K
Y. CH2
CURR
R175
1500
C108
6V220
C109
0.01
Q41
UN2213
47K
IC19
VCR0159
Y. CH2
BAL
VR18
500
R179
1500
R180
1500
R181
100
Y. CH2
FC
TP12
Q44
2SC3326
VR20
500
Q42
2SC2851
X 2
Q43
R183
120
R184
33(1/8W)
R185
33
(1/8W)
R182
100
R186
1K
C112
0.01
C113
6V220
L27
270μ
T1
EIR7QE013B
T3
EIR7QE008B
C115
0.01
Q45
2SC2295
VR17
2K
R188
47K
R189
10K
R190
1K
Y. CH1
CURR
R187
1500
C114
0.01
Q46
UN2213
IC20
VCR0159
Y. CH1
BAL
VR19
500
R191
1500
R192
1500
R193
100
Y. CH1
FC
TP13
Q49
2SC3326
VR21
500
Q47
2SC2851
X 2
Q48
R195
120
R196
33 (1/8W)
R197
33
(1/8W)
R194
100
R198
1K
C116
0.01
C117
6V220
L28
270μ
T2
EIR7QE013B
T4
EIR7QE008B
L24
100μ
L25
100μ
R200
1K
R199
120
C120
6V220
C121
0.01
Q50
2SC2295
VR22
2K
R201
47K
R202
10K
R203
1K
C. CH2
CURR
R213
1500
C118
6V220
C119
0.01
Q51
UN2213
IC21
VCR0159
C. CH2
BAL
VR24
500
R204
1500
R205
1500
R206
100
TP15
Q54
2SC3326
VR26
500
C. CH2
FC
Q52
2SC2851
X 2
Q53
R208
120
R209
33 (1/8W)
R210
33
(1/8W)
R207
100
R211
1K
C122
0.01
C123
6V220
L29
270μ
T5
EIR7QE013B
T7
EIR7QE008B
TP14
C125
0.01
Q55
2SC2295
VR23
2K
R215
47K
R216
10K
R217
1K
C. CH1
CURR
R214
1500
C124
0.01
Q56
UN2213
IC22
VCR0159
C. CH1
BAL
VR25
500
R218
1500
R219
1500
R220
100
TP16
Q59
2SC3326
VR27
500
C. CH1
FC
Q57
2SC2851
X 2
Q58
R222
120
R223
33
(1/8W)
R224
33
(1/8W)
R221
100
R212
1K
C126
0.01
C127
6V220
L30
270μ
T6
EIR7QE013B
T8
EIR7QE008B
L26
100μ
R228
8200
R226
3300
C130
0.01
C131
16V47
L31
100μ
C129
0.01
Q61
2SC3356
Q63
2SC2295
R225
47
R227
2700
R229
47K
C132
0.01
R231
820
Q62
2SC3704
R230
3300
C128
0.01
Q60
2SD1328
R232
1K
R234
8200
R236
3300
C142
0.01
C143
16V47
L33
100μ
C140
0.01
Q65
2SC3356
Q67
2SC2295
R233
47
R235
2200
R237
47K
C141
0.01
R239
820
C139
0.01
Q66
2SC3704
R238
3300
Q64
2SD1328
R240
1K
R268
8200
R313
3300
C159
0.01
C160
16V47
L35
100μ
C157
0.01
Q84
2SC3356
Q86
2SC2295
R267
47
R269
2200
R270
56K
C161
0.01
R271
1K
C158
0.01
Q85
2SC3704
R286
3300
Q83
2SD1328
R285
1K
R289
8200
R316
3300
C171
0.01
C172
16V47
L37
100μ
C168
0.01
Q88
2SC3356
Q90
2SC2295
R288
47
R290
2200
R291
56K
C170
0.01
R294
1K
C169
0.01
Q89
2SC3704
R293
3300
Q87
2SD1328
R292
1K
C173
0.01
C133
16V47
C134
0.01
L32
100μ
IC23
AN6330
TP18
Q68
2SC2295
C135
50V1
R310
150
Q69
2SC2295
C136
50V1
R311
150
C137
0.01
C138
16V10
3RD
AMP
SW
1ST.
2ND
AMP
MIX
AMP
POWER
SUPPLY
C145
0.01
R241
1K
R242
8200
R243
0
VR28
2K
C146
0.01
L34
6.8μ
R246
0
Y.
BAL
C148
8P
C149
0.01
R244
8200
C147
0.01
R245
1K
R247
1500
TP17
C150
0.1
R248
100
Q70
2SD60
R254
27
C152
0.01
Q75
UN2215
R255
22K
10K
Q76
2SD601
R256
2700
R257
22K
Q77
UN2215
Q78
2SD601
R258
2700
Q79
2SD1328
R260
47K
R259
470
C144
0.01
L36
100μ
C163
16V47
C164
0.01
IC 24
AN6330
Q91
C162
50V1
R314
150
2SC2295 X 2
Q92
R315
150
C165
50V1
C166
0.01
C167
16V10
C174
0.01
R272
1K
R273
8200
VR29
2K
C175
0.01
L38
6.8μ
C
BAL
C176
10P
C177
0.01
R274
8200
R275
4700
R276
5600
C194
0.01
R287
1K
TP19
R278
100
Q93
R277
100
C178
0.1
C180
0.01
C181
6V47
R295
1000
FL4
ELB4M043
Q97
2SD601
R299
1800
C193
150P
Q99
2SD601
R296
1000
Q98
2SC2404
R297
3300
L39
150μ
R300
3300
C183
16V10
C182
1000P
R298
3300
R317
220
C184
0.01
R301
1000
FL5
ELB4L053
Q101
2SD601
R302
1000
R303
3300
11
12
13
14
15
16
17
18
19
20
21
22
23

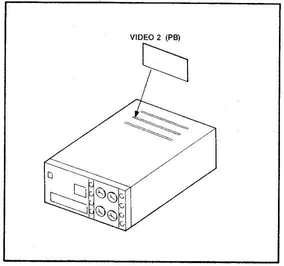

IC19 VCR0159
IC20 VCR0159
IC21 VCR0159
IC22 VCR0159
IC23 AN6330
IC24 AN6330
Q40 2SC2295
Q41 UN2213
Q46 UN2213
Q51 UN2213
Q56 UN2213
Q42 2SC2851 X 2 Q43
Q47 2SC2851 X 2 Q48
Q52 2SC2851 X 2 Q53
Q57 2SC2851 X 2 Q58
Q44 2SC3326
Q49 2SC3326
Q54 2SC3326
Q59 2SC3326
Q60 2SD1328
Q61 2SC3356
Q62 2SC3704
Q63 2SC2295
Q64 2SD1328
Q65 2SC3356
Q66 2SC3704
Q67 2SC2295
Q83 2SD1328
Q84 2SC3356
Q85 2SC3704
Q86 2SC2295
Q87 2SD1328
Q88 2SC3356
Q89 2SC3704
Q90 2SC2295
Q68 2SC2295
Q69 2SC2295
Q70 2SD601
Q73 UN2213
Q74 2SB779
Q75 UN2215
Q76 2SD601
Q77 UN2215
Q78 2SD601
Q79 2SD1328
Q80 2SD1328
Q81 2SB779
Q82 2SB709
Q91
Q92
2SC2295 X 2
Q93
Q94
2SD601 X 2
Q97 2SD601
Q98 2SC2404
Q99 2SD601
Q101 2SD601
Q101 2SC2404
Q102 2SD601
T1 EIR7QE013B
T2 EIR7QE013B
T3 EIR7QE008B
T4 EIR7QE008B
T5 EIR7QE013B
T6 EIR7QE013B
T7 EIR7QE008B
T8 EIR7QE008B
FL4 ELB4M043
FL5 ELB4L053
Y. CH2 FC
Y. CH1 FC
C. CH2 FC
C. CH1 FC
Y. CH2 BAL
Y. CH1 BAL
C. CH2 BAL
C. CH1 BAL
Y. BAL
C BAL
TP12
TP13
TP15
TP16
TP17
TP18
TP19
1ST. 2ND AMP
3RD AMP
SW
MIX AMP
POWER SUPPLY
J1
42 Y REC SW2 IN P306-2 → P511-2 (SERVO)
43 Y H SW IN P306-4 → P511-5 (SERVO)
3 +9V
8, 9 +5V
33A REC AMP ON Ⓛ P305-6 → P511-5 (SERVO)
5, 6 -5V
16 C H SW IN P303-3 → P511-7 (SERVO)
41 Y REC SW1 IN P306-1 → P511-1 (SERVO)
24 FM AUDIO IN P301-5 → P216-3 (AUDIO)
15 C REC SW2 IN P303-2 → P511-4 (SERVO)
14 C REC SW1 IN P303-1 → P511-3 (SERVO)
47 Y RF OUT (VIDEO 2-47)
12 C RF OUT (VIDEO 2-12)
20 FM AUDIO 2 OUT P301-3 → P216-5 (AUDIO)
18 FM AUDIO 1 OUT P301-1 → P216-1 (AUDIO)
P371
1 Y R/P HEAD CH1 (X)
2 Y R/P HEAD CH1 (Y)
3 GND
4 GND
5 Y R/P HEAD CH2 (Y)
6 Y R/P HEAD CH2 (X)
Y R/P HEAD
P372
1 C R/P HEAD CH1 (X)
2 C R/P HEAD CH1 (Y)
3 GND
4 GND
5 C R/P HEAD CH2 (Y)
6 C R/P HEAD CH2 (X)
C R/P HEAD
REF.NO.3000 SERIES
16
17
18
19
20
21
22
23
24
25
26

REVERSE SIDE

VIDEO 2 P.C.B.

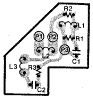
VIDEO 2 P.C. BOARD (VEP83077A) (FOR AU-520/S)
(VEP83077B) (FOR AU-505)

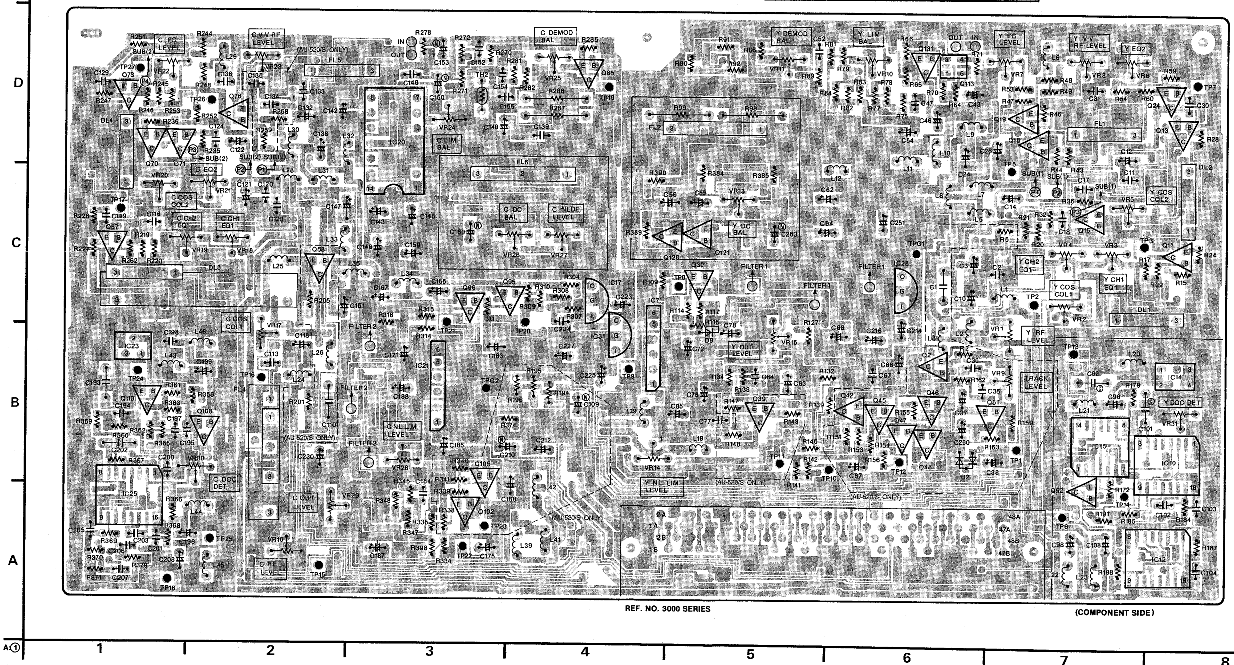
P.C. BOARD LOCATION



NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

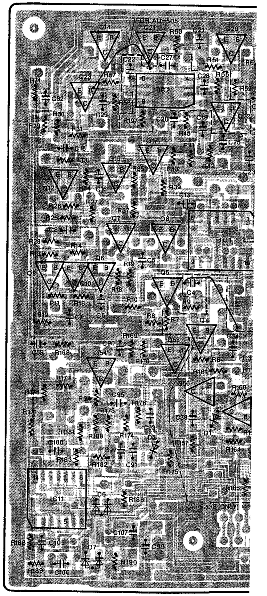
VIDEO 2 SUB (1) P.C.B. (VE
(PART OF VEP83077A/B)


R2
L1
P1
P2
R1
P3
L2
C1
L3
R3
C2


E
D
C
B
A
A①
1
2
3
4
5
6
7
8
C FC LEVEL
C V-V RF LEVEL
(AU-520/S ONLY)
C DEMOD BAL
Y DEMOD BAL
Y LIM BAL
Y FC LEVEL
Y V-V RF LEVEL
Y EQ2
C LIM BAL
C EQ2
C COS COL2
C CH2 EQ1
C CH1 EQ1
C DC BAL
C NLDE LEVEL
Y DC BAL
Y COS COL2
Y CH2 EQ1
Y COS COL1
Y CH1 EQ1
Y RF LEVEL
Y OUT LEVEL
TRACK LEVEL
Y DOC DET
C COS COL1
C NL LIM LEVEL
C DOC DET
C OUT LEVEL
C RF LEVEL
Y NL LIM LEVEL
FILTER 1
FILTER 2
IC10
IC12
IC14
IC15
IC17
IC20
IC21
IC25
IC28
IC31
FL1
FL2
FL4
FL5
FL6
DL1
DL2
DL3
DL4

REF. NO. 3000 SERIES

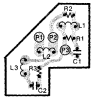
(COMPONENT SIDE)


9
FOR AU-505
(AU-520/S ONLY)

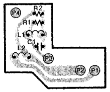
(FOIL SIDE)

FOR AU-520S & AU-520
FOR AU-505 ONLY

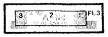
VIDEO 2 SUB (1) P.C.B. (VEP83078A)
(PART OF VEP83077A/B)



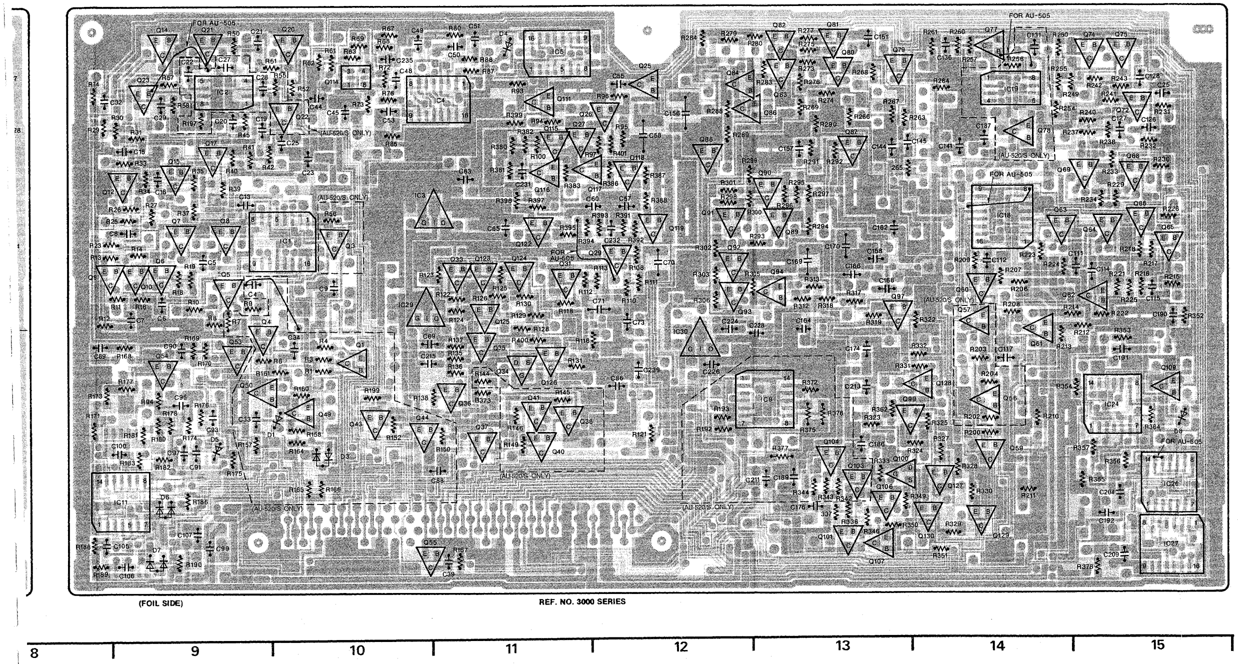
VIDEO 2 SUB (2) P.C.B. (VEP83095A)
(PART OF VEP83077A/B)



FILTER INTERMEDIATE 1
P.C.B. (VEP80543A)
(PART OF VEP83077A/B)



FILTER INTERMEDIATE 2
P.C.B. (VEP80543B)
(PART OF VEP83077A/B)



(FOIL SIDE)

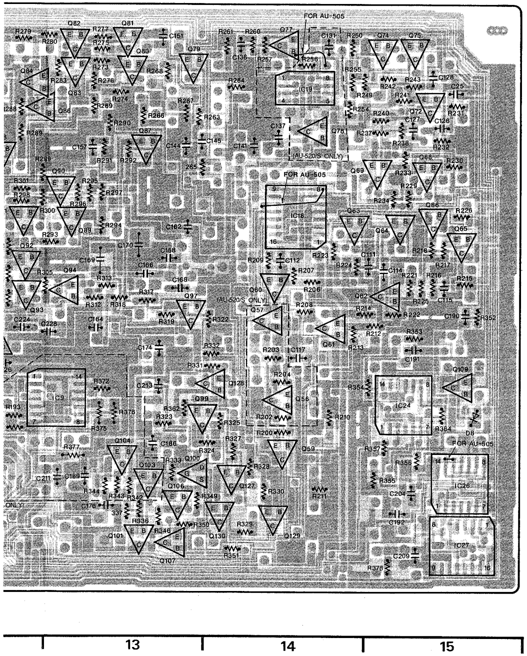
REF. NO. 3000 SERIES

VIDEO 2 P.C.B.				
Transistors		Q3077	D-14	IC3
Q3001	B-10	Q3078	D-14	IC3
Q3002	B-6	Q3079	D-13	IC3
Q3003	C-10	Q3080	D-13	IC3
Q3004	B-9	Q3081	D-13	IC3
Q3005	C-9	Q3082	D-13	IC3
Q3006	C-9	Q3083	D-13	**Test P**
Q3007	C-9	Q3084	D-12	
Q3008	C-9	Q3085	D-4	TP3
Q3009	C-8	Q3086	D-13	TP3
Q3010	C-9	Q3087	D-13	TP3
Q3011	C-8	Q3088	D-12	TP3
Q3012	C-9	Q3089	C-13	TP3
Q3013	D-8	Q3090	C-13	TP3
Q3014	D-9	Q3091	C-12	TP3
Q3015	C-9	Q3092	C-12	TP30
Q3016	C-7	Q3093	C-12	TP30
Q3017	D-9	Q3094	C-13	TP30
Q3018	D-7	Q3095	C-3	TP30
Q3019	D-7	Q3096	C-3	TP30
Q3020	D-10	Q3097	C-13	TP30
Q3021	D-9	Q3099	B-13	TP30
Q3022	D-10	Q3100	B-13	TP30
Q3023	D-9	Q3101	A-13	TP30
Q3024	D-8	Q3102	A-3	TP30
Q3025	D-12	Q3103	B-13	TP30
Q3026	D-11	Q3104	B-13	TP30
Q3027	D-11	Q3105	B-3	TP30
Q3029	C-12	Q3106	A-13	TP30
Q3030	C-5	Q3107	A-13	TP30
Q3031	C-11	Q3108	B-2	TP30
Q3033	C-11	Q3109	B-15	TP30
Q3034	B-11	Q3110	B-1	TP30
Q3035	B-11	Q3111	D-11	TP30
Q3036	B-11	Q3113	D-6	TPG3
Q3037	B-11	Q3114	D-10	TPG3
Q3038	B-11	Q3115	D-11	**Adjustm**
Q3039	B-5	Q3116	C-11	
Q3040	B-11	Q3117	C-11	VR300
Q3041	B-11	Q3118	C-12	VR300
Q3042	B-6	Q3119	C-12	VR300
Q3043	B-10	Q3120	C-5	VR300
Q3044	B-10	Q3121	C-5	VR300
Q3045	B-6	Q3122	C-11	VR300
Q3046	B-6	Q3123	C-11	VR300
Q3047	B-6	Q3124	C-11	VR300
Q3048	B-6	Q3125	B-11	VR301
Q3049	B-10	Q3126	B-11	VR301
Q3050	B-9	Q3127	C-11	VR301
Q3051	B-7	Q3128	B-14	VR301
Q3052	A-7	Q3129	A-14	VR301
Q3053	B-9	Q3130	A-14	VR301
Q3054	B-9	Q3131	D-6	VR301
Q3055	A-10			VR301
Q3056	B-14	**Integrated Circuits**		VR301
Q3057	C-14	IC3001	C-10	VR302
Q3058	C-2	IC3002	D-9	VR302
Q3059	B-14	IC3003	C-10	VR302
Q3060	C-14	IC3004	D-11	VR302
Q3061	B-14	IC3005	D-11	VR302
Q3062	C-14	IC3007	C-4	VR3025
Q3063	C-14	IC3009	B-13	VR3026
Q3064	C-15	IC3010	B-8	VR3027
Q3065	C-15	IC3011	A-9	VR3028
Q3066	C-15	IC3012	A-8	VR3029
Q3067	C-1	IC3014	B-8	VR3030
Q3068	C-15	IC3015	B-7	VR3031
Q3069	C-15	IC3017	C-4	
Q3070	C-1	IC3018	C-14	
Q3071	C-1	IC3019	D-14	
Q3072	D-15	IC3020	D-3	
Q3073	D-1	IC3021	B-3	
Q3074	D-15	IC3023	B-1	
Q3075	D-15	IC3024	A-15	
Q3076	D-2	IC3025	A-1	

ADDRESS INFORMATION

TER INTERMEDIATE 1
.B. (VEP80543A)
RT OF VEP83077A/B)

FILTER INTERMEDIATE 2
P.C.B. (VEP80543B)
(PART OF VEP83077A/B)



VIDEO 2 P.C.B.

Transistors	
Q3001	B-10
Q3002	B-6
Q3003	C-10
Q3004	B-9
Q3005	C-9
Q3006	C-9
Q3007	C-9
Q3008	C-9
Q3009	C-8
Q3010	C-9
Q3011	C-8
Q3012	C-9
Q3013	D-8
Q3014	D-9
Q3015	C-9
Q3016	C-7
Q3017	D-9
Q3018	D-7
Q3019	D-7
Q3020	D-10
Q3021	D-9
Q3022	D-10
Q3023	D-9
Q3024	D-8
Q3025	D-12
Q3026	D-11
Q3027	D-11
Q3029	C-12
Q3030	C-5
Q3031	C-11
Q3033	C-11
Q3034	B-11
Q3035	B-11
Q3036	B-11
Q3037	B-11
Q3038	B-11
Q3039	B-5
Q3040	B-11
Q3041	B-11
Q3042	B-6
Q3043	B-10
Q3044	B-10
Q3045	B-6
Q3046	B-6
Q3047	B-6
Q3048	B-6
Q3049	B-10
Q3050	B-9
Q3051	B-7
Q3052	A-7
Q3053	B-9
Q3054	B-9
Q3055	A-10
Q3056	B-14
Q3057	C-14
Q3058	C-2
Q3059	B-14
Q3060	C-14
Q3061	B-14
Q3062	C-14
Q3063	C-14
Q3064	C-15
Q3065	C-15
Q3066	C-15
Q3067	C-1
Q3068	C-15
Q3069	C-15
Q3070	C-1
Q3071	C-1
Q3072	D-15
Q3073	D-1
Q3074	D-15
Q3075	D-15
Q3076	D-2
Q3077	D-14
Q3078	D-14
Q3079	D-13
Q3080	D-13
Q3081	D-13
Q3082	D-13
Q3083	D-13
Q3084	D-12
Q3085	D-4
Q3086	D-13
Q3087	D-13
Q3088	D-12
Q3089	C-13
Q3090	C-13
Q3091	C-12
Q3092	C-12
Q3093	C-12
Q3094	C-13
Q3095	C-3
Q3096	C-3
Q3097	C-13
Q3099	B-13
Q3100	B-13
Q3101	A-13
Q3102	A-3
Q3103	B-13
Q3104	B-13
Q3105	B-3
Q3106	A-13
Q3107	A-13
Q3108	B-2
Q3109	B-15
Q3110	B-1
Q3111	D-11
Q3113	D-6
Q3114	D-10
Q3115	D-11
Q3116	C-11
Q3117	C-11
Q3118	C-12
Q3119	C-12
Q3120	C-5
Q3121	C-5
Q3122	C-11
Q3123	C-11
Q3124	C-11
Q3125	B-11
Q3126	B-11
Q3127	C-11
Q3128	B-14
Q3129	A-14
Q3130	A-14
Q3131	D-6

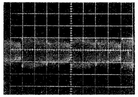
Integrated Circuits	
IC3001	C-10
IC3002	D-9
IC3003	C-10
IC3004	D-11
IC3005	D-11
IC3007	C-4
IC3009	B-13
IC3010	B-8
IC3011	A-9
IC3012	A-8
IC3014	B-8
IC3015	B-7
IC3017	C-4
IC3018	C-14
IC3019	D-14
IC3020	D-3
IC3021	B-3
IC3023	B-1
IC3024	A-15
IC3025	A-1
IC3026	A-15
IC3027	A-15
IC3028	C-6
IC3029	C-10
IC3030	B-12
IC3031	B-4

Test Points	
TP3001	C-6
TP3002	C-7
TP3003	C-8
TP3005	C-7
TP3006	A-7
TP3007	D-8
TP3008	C-5
TP3009	B-4
TP3010	B-5
TP3011	B-5
TP3012	B-6
TP3013	B-7
TP3014	A-7
TP3015	A-2
TP3016	B-2
TP3017	C-1
TP3018	A-1
TP3019	D-4
TP3020	B-4
TP3021	B-3
TP3022	A-3
TP3023	A-3
TP3024	A-1
TP3025	A-2
TP3026	D-2
TP3027	D-1
TPG3001	C-6
TPG3002	B-3

Adjustments	
VR3001	B-7
VR3002	C-7
VR3003	C-7
VR3004	C-7
VR3006	D-7
VR3007	D-7
VR3008	D-7
VR3009	B-7
VR3010	D-6
VR3011	D-5
VR3013	C-5
VR3014	B-5
VR3015	B-5
VR3016	A-2
VR3017	B-2
VR3018	C-2
VR3019	C-2
VR3020	C-1
VR3021	C-2
VR3022	D-1
VR3023	D-2
VR3024	D-3
VR3025	D-4
VR3026	C-4
VR3027	C-4
VR3028	B-3
VR3029	A-2
VR3030	B-2
VR3031	B-8

ADDRESS INFORMATION

VIDEO 2 (PLAY) WAVEFORMS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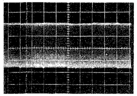
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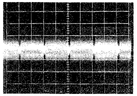
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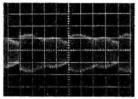
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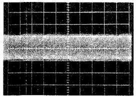
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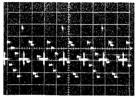
TP22
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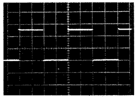
TP6
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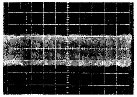
TP16, TP17, TP26, TP27
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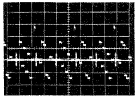
TP23
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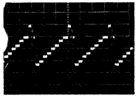
TP8
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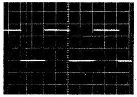
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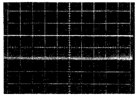
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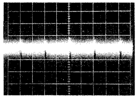
TP9
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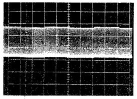
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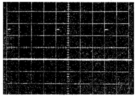
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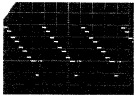
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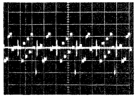
TP20
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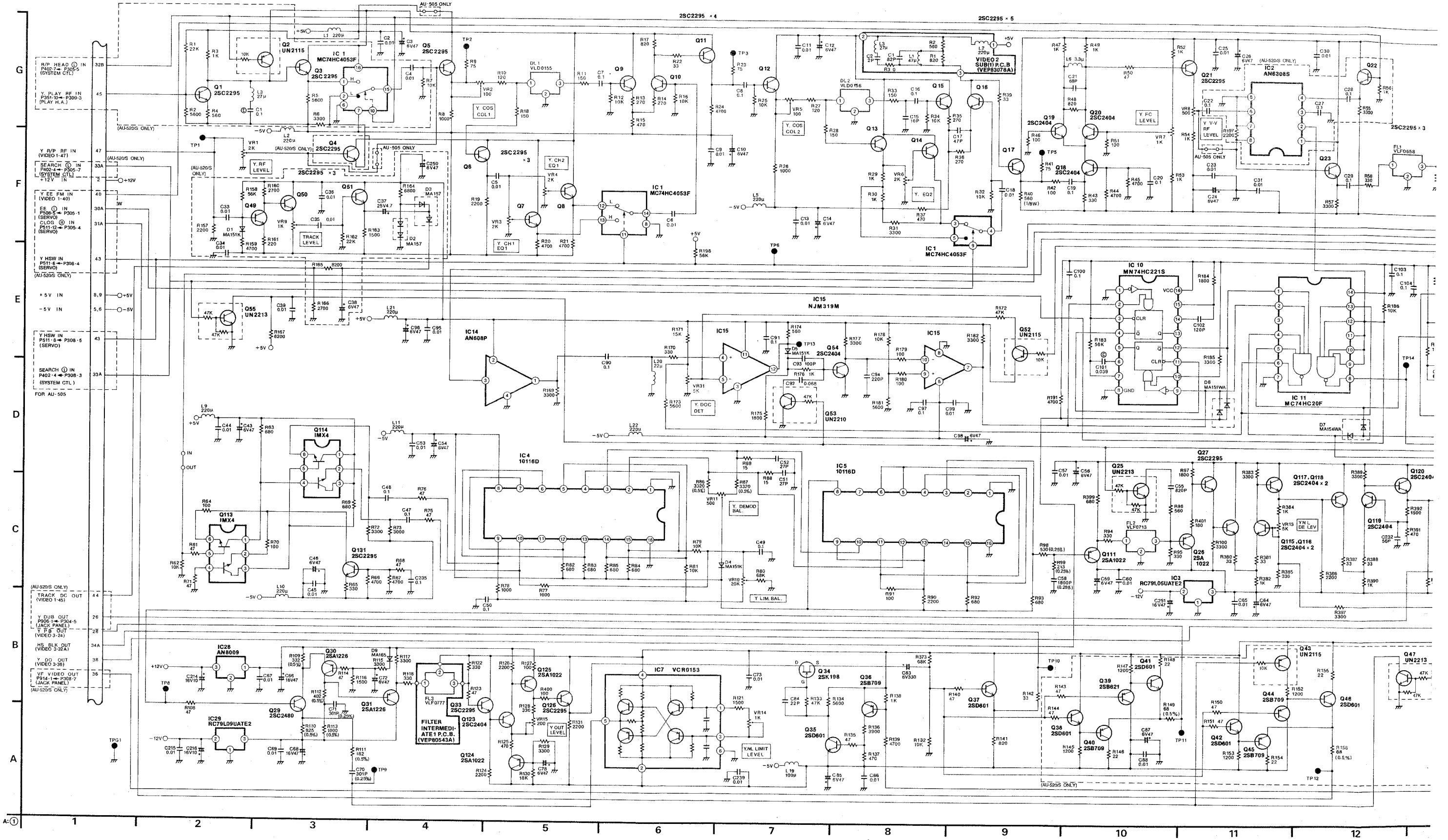
VIDEO 2 SCHEMATIC DIAGRAM

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY



R/P HEAD Ⓛ IN P402-7 → P305-5 (SYSTEM CTL)
Y. PLAY RF IN P351-10 → P309-3 (PLAY H.A.)
Y R/P RF IN (VIDEO 1-47)
SEARCH Ⓛ IN P402-4 → P305-7 (SYSTEM CTL)
+12V IN
Y EE FM IN (VIDEO 1-40)
EE Ⓗ IN P508-5 → P305-1 (SERVO)
CLOG Ⓗ IN P511-12 → P305-4 (SERVO)
Y HSW IN P511-6 → P306-4 (SERVO)
+5V IN
-5V IN
Y HSW IN P511-6 → P308-5 (SERVO)
SEARCH Ⓛ IN P402-4 → P308-3 (SYSTEM CTL)
FOR AU-505
TRACK DC OUT (VIDEO 1-45)
Y DUB OUT P906-1 → P304-5 (JACK PANEL)
Y PB OUT (VIDEO 3-24)
HS BLK OUT (VIDEO 3-32A)
Y DO OUT (VIDEO 3-38)
VF VIDEO OUT P914-1 → P308-7 (JACK PANEL)
(AU-520/S ONLY)
AU-505 ONLY
2SC2295 × 4
2SC2295 × 5
2SC2295 × 3
Q1 2SC2295
Q2 UN2115
Q3 2SC2295
Q4 2SC2295
Q5 2SC2295
IC 1 MC74HC4053F
Q6
Q7
Q8
Q9
Q10
Q11
Q12
Q13
Q14
Q15
Q16
Q17
Q18 2SC2404
Q19 2SC2404
Q20 2SC2404
Q21 2SC2295
Q22
Q23
IC2 AN6308S
VIDEO 2 SUB(1) P.C.B (VEP83078A)
DL 1 VLD0155
DL2 VLD0156
FL1 VLF0658
Y. COS COL 1
Y. COS COL 2
Y. RF LEVEL
Y. CH2 EQ1
Y. CH1 EQ1
Y. EQ2
Y. FC LEVEL
Y. V·V RF LEVEL
TRACK LEVEL
Q49
Q50
Q51
Q55 UN2213
IC14 AN608P
IC15 NJM319M
Q52 UN2115
Q53 UN2210
Q54 2SC2404
Y. DOC DET
IC 10 MN74HC221S
IC 11 MC74HC20F
Q114 IMX4
Q113 IMX4
Q131 2SC2295
IC4 10116D
IC5 10116D
Y. DEMOD BAL.
Y. LIM. BAL.
Q25 UN2213
Q27 2SC2295
Q26 2SA1022
Q111 2SA1022
Q117, Q118 2SC2404 × 2
Q115, Q116 2SC2404 × 2
Q119 2SC2404
Q120 2SC2404
Y.N.L DE LEV
IC3 RC79L05UATE2
FL2 VLF0713
IC28 AN8009
IC29 RC79L09UATE2
Q29 2SC2480
Q30 2SA1226
Q31 2SA1226
FL3 VLF0777
FILTER INTERMEDIATE 1 P.C.B. (VEP80543A)
Q33 2SC2295
Q123 2SC2404
Q124 2SA1022
Q125 2SA1022
Q126 2SC2295
Y OUT LEVEL
IC7 VCR0153
Y.NL LIMIT LEVEL
Q34 2SK198
Q35 2SD601
Q36 2SB709
Q37 2SD601
Q38 2SD601
Q39 2SB621
Q40 2SB709
Q41 2SD601
Q42 2SD601
Q43 UN2115
Q44 2SB709
Q45 2SB709
Q46 2SD601
Q47 UN2213
TP1
TP2
TP3
TP5
TP6
TP8
TP9
TP10
TP11
TP12
TP13
TP14
TPG1
G
F
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D
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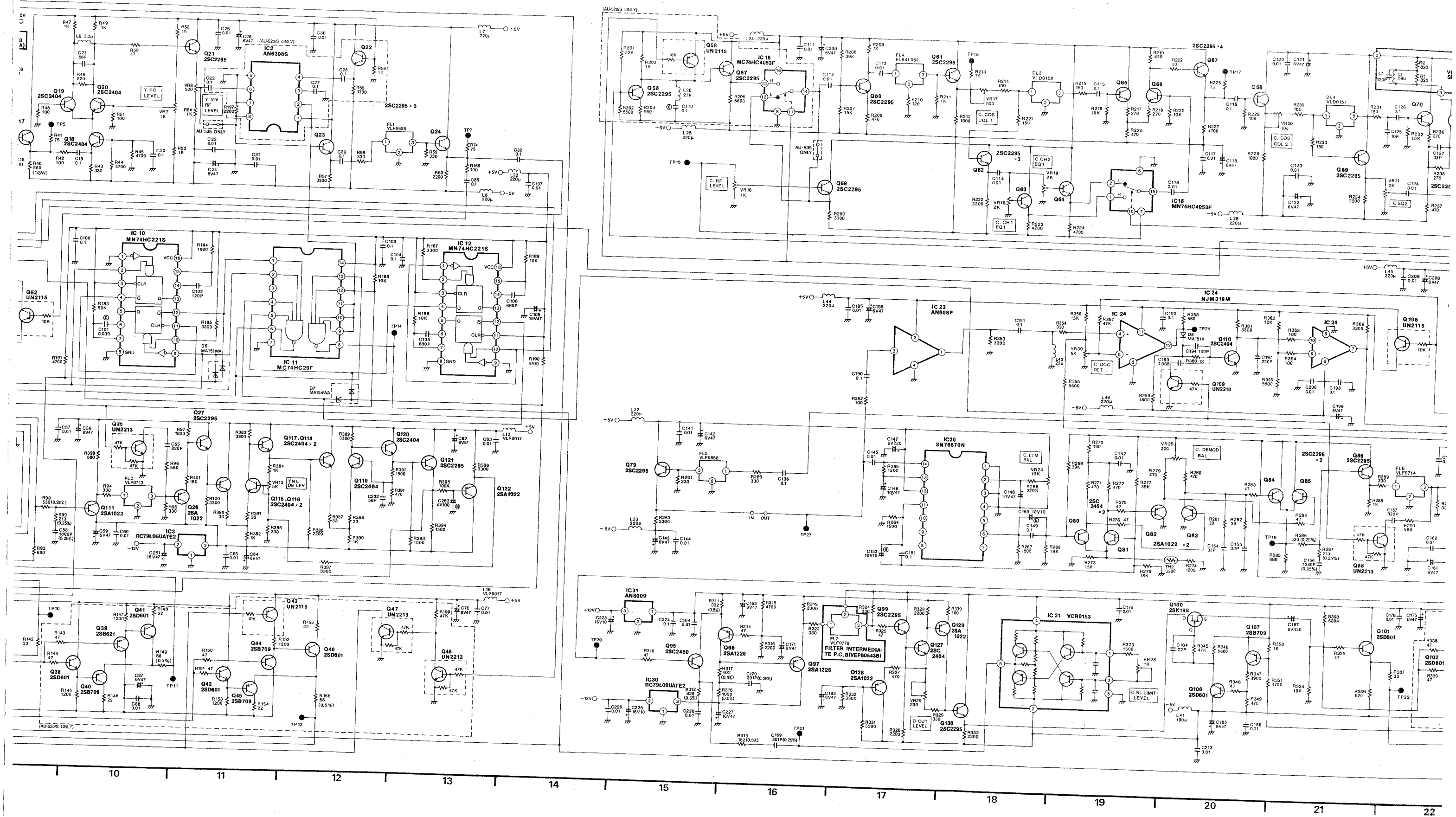

Y FC LEVEL
Y VV RF LEVEL
AU-505 ONLY
(AU-520/S ONLY)
IC2 AN6308S
Q21 2SC2295
Q22
2SC2295 × 3
Q23
Q24
FL1 VLF0658
Q18 2SC2404
Q19 2SC2404
Q20 2SC2404
TP5
TP7
IC 10 MN74HC221S
IC 11 MC74HC20F
IC 12 MN74HC221S
TP14
D6 MA151WA
D7 MA154WA
Q52 UN2115
Q25 UN2213
Q27 2SC2295
Q117, Q118 2SC2404 × 2
Q120 2SC2404
Q121 2SC2295
Q122 2SA1022
Q119 2SC2404
Q115, Q116 2SC2404 × 2
Y NL DE LEV
FL2 VLF0713
Q111 2SA1022
Q26 2SA 1022
IC3 RC79L05UATE2
L12 VLP0017
TP10
TP11
TP12
Q41 2SD601
Q39 2SB621
Q38 2SD601
Q40 2SB709
Q43 UN2115
Q44 2SB709
Q42 2SD601
Q45 2SB709
Q46 2SD601
Q47 UN2213
Q48 UN2213
L16 VLP0017
(AU-520/S ONLY)
Q58 UN2115
IC 18 MC74HC4053F
Q56 2SC2295
Q57 2SC2295
AU-505 ONLY
TP15
C. RF LEVEL
Q59 2SC2295
FL4 ELB4L052
Q80 2SC2295
Q61 2SC2295
TP16
DL3 VLD0158
C. COS COL 1
2SC2295 × 3
Q62
C. CH2 EQ 1
Q63
Q64
C. CH1 EQ1
Q65
Q66
Q67
2SC2295 × 4
TP17
IC18 MN74HC4053F
Q68
DL4 VLD0157
C. COS COL 2
Q69 2SC2295
Q70
C EQ2
IC 23 AN608P
IC 24 NJM319M
C. DOC DET
TP24
D8 MA151K
Q110 2SC2404
Q109 UN2210
Q108 UN2115
Q79 2SC2295
FL5 VLF0658
IC20 SN76670N
C. LIM BAL
IN OUT
TP27
C. DEMOD BAL
Q80
Q81
2SC 2404 × 2
Q82 2SA1022 × 2
Q83
TH2
Q84
Q85
2SC2295 × 2
Q86 2SC2295
FL6 VLF0714
TP19
Q88 UN2213
IC31 AN8009
TP20
Q95 2SC2480
Q96 2SA1226
IC30 RC79L09UATE2
FL7 VLF0778
FILTER INTERMEDIATE P.C.B(VEP80543B)
Q99 2SC2295
Q97 2SA1226
Q127 2SC 2404
Q128 2SA1022
Q129 2SA 1022
Q130 2SC2295
C OUT LEVEL
TP21
IC 21 VCR0153
C. NL LIMIT LEVEL
Q100 2SK198
Q107 2SB709
Q106 2SD601
Q101 2SD601
Q102 2SD601
TP22
10
11
12
13
14
15
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19
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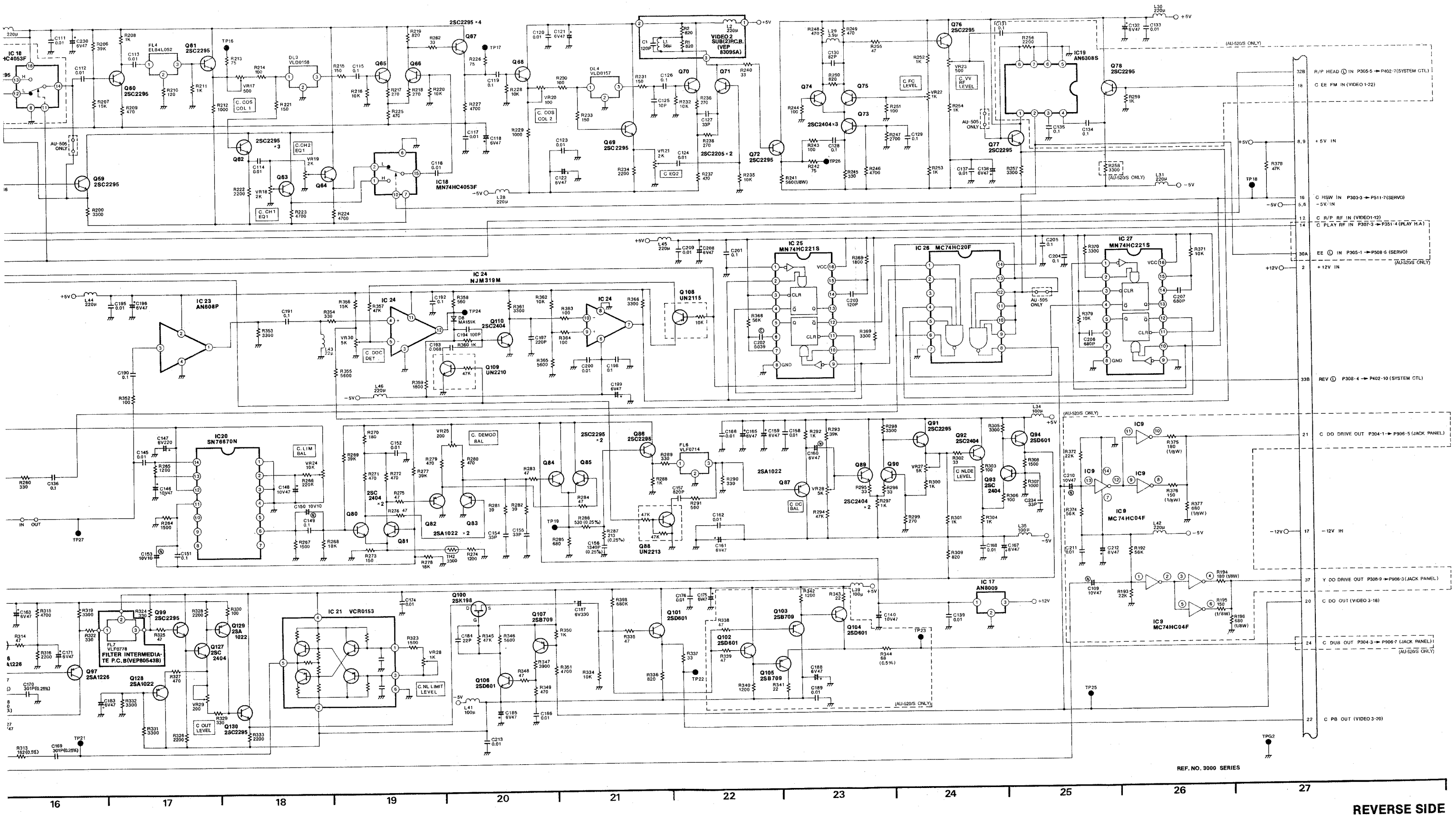
22

VIDEO 2 SCHEMATIC DIAGRAM

Effective from
Serial No. H9TNA0128 (FOR AU-505)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IC18 MN74HC4053F
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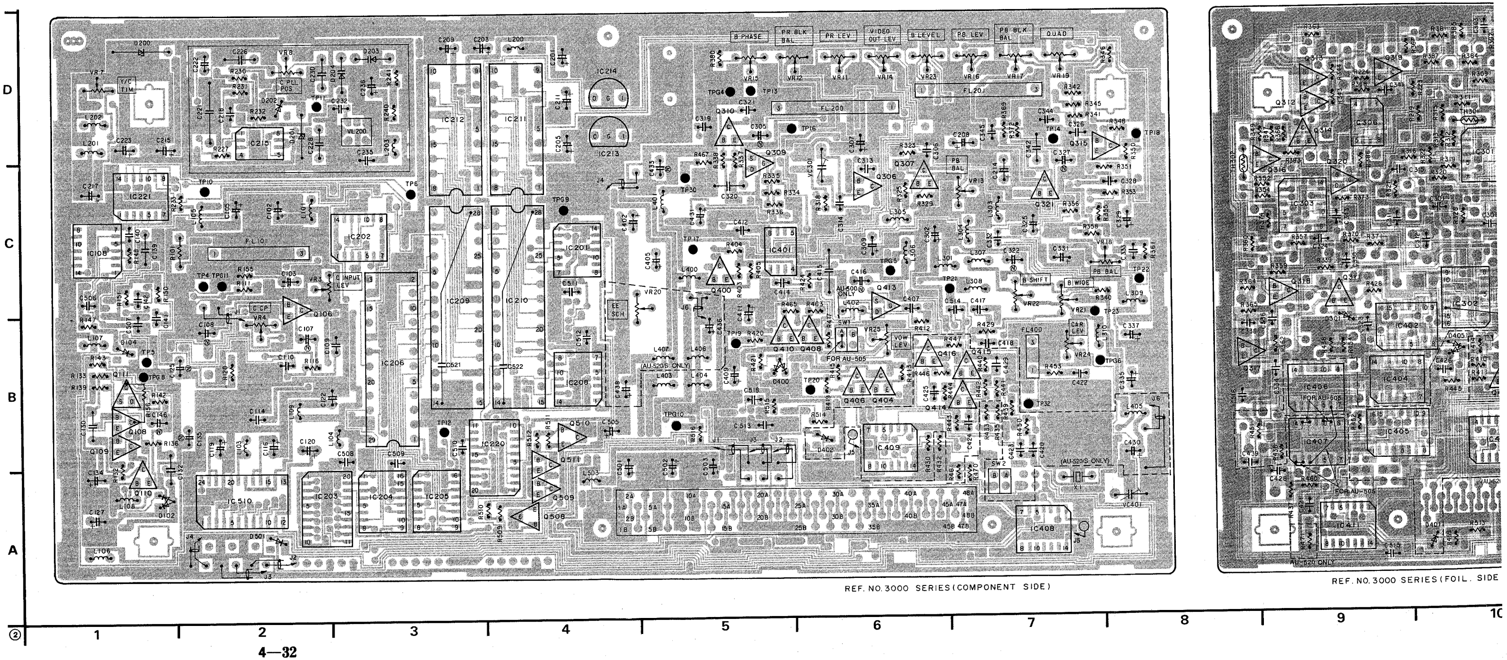
Q60 2SC2295
Q81 2SC2295
FL4 ELB4L052
DL3 VLD0158
DL4 VLD0157
2SC2295 ×4
Q65
Q66
Q67
Q68
Q69 2SC2295
Q70
Q71
Q72 2SC2295
2SC2205 ×2
Q73
Q74
Q75
2SC2404×3
Q76 2SC2295
Q77 2SC2295
Q78 2SC2295
IC19 AN6308S
VIDEO 2 SUB(2)P.C.B. (VEP 83095A)
C.COS COL 1
C.COS COL 2
C.CH2 EQ1
C.CH1 EQ1
C EQ2
C.FC LEVEL
C.VV RF LEVEL
AU-505 ONLY
(AU-520/S ONLY)
IC 23 AN608P
IC 24 NJM319M
Q108 UN2115
Q109 UN2210
Q110 2SC2404
C.DOC DET
IC 25 MN74HC221S
IC 26 MC74HC20F
IC 27 MN74HC221S
IC20 SN76670N
C.LIM BAL
C.DEMOD BAL
Q80
Q81
Q82
Q83
2SC2404 ×2
2SA1022 ×2
Q84
Q85
2SC2295 ×2
Q86 2SC2295
FL6 VLF0714
Q87 2SA1022
Q88 UN2213
C DC BAL
Q89
Q90
2SC2404 ×2
Q91 2SC2295
Q92 2SC2404
Q93 2SC2404
Q94 2SD601
C NLDE LEVEL
IC9 MC74HC04F
IC 17 AN8009
IC 21 VCR0153
C.NL LIMIT LEVEL
Q97 2SA1226
Q99 2SC2295
Q127 2SC2404
Q128 2SA1022
Q129 2SA1022
Q130 2SC2295
C OUT LEVEL
FL7 VLF0778
FILTER INTERMEDIATE P.C.B (VEP80543B)
Q100 2SK198
Q106 2SD601
Q107 2SB709
Q101 2SD601
Q102 2SD601
Q103 2SB709
Q104 2SD601
Q105 2SB709
TP16
TP17
TP18
TP19
TP21
TP22
TP23
TP24
TP25
TP26
TP27
TPG2
+5V
−5V
+12V
−12V
32B R/P HEAD ① IN P305-5 → P402-7 (SYSTEM CTL)
18 C EE FM IN (VIDEO 1-22)
8,9 +5V IN
16 C HSW IN P303-3 → P511-7 (SERVO)
5,6 −5V IN
12 C R/P RF IN (VIDEO1-12)
14 C PLAY RF IN P307-3 → P351-4 (PLAY H.A)
30A EE ① IN P305-1 → P508-6 (SERVO)
2 +12V IN
33B REV ① P308-4 → P402-10 (SYSTEM CTL)
21 C DO DRIVE OUT P304-1 → P906-5 (JACK PANEL)
17 −12V IN
37 Y DO DRIVE OUT P306-9 → P906-3 (JACK PANEL)
20 C DO OUT (VIDEO 3-18)
24 C DUB OUT P304-3 → P906-7 (JACK PANEL)
22 C PB OUT (VIDEO 3-20)
REF. NO. 3000 SERIES
16
17
18
19
20
21
22
23
24
25
26
27

REVERSE SIDE
VIDEO 3 P.C.B.

VIDEO 3 P.C. BOARD (VEP88051A) (FOR AU-520/S)
(VEP88051B) (FOR AU-505)

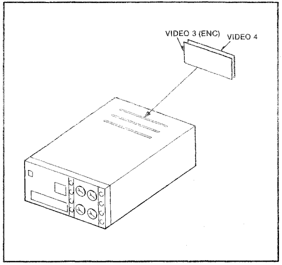
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


D
C
B
A
②
1
2
3
4
5
6
7
8
9
10
B PHASE
PR BLK BAL
PR LEV
VIDEO OUT LEV
B LEVEL
PB LEV
PB BLK BAL
QUAD
Y/C TIM
C PLL POS
C INPUT LEV
C CP
PB BAL
B SHIFT
B WIDE
PB BAL
VOW LEV
CAR LEV
EE SCH
FOR AU-505
(AU-520/S ONLY)
AU-500 ONLY
AU-520 ONLY

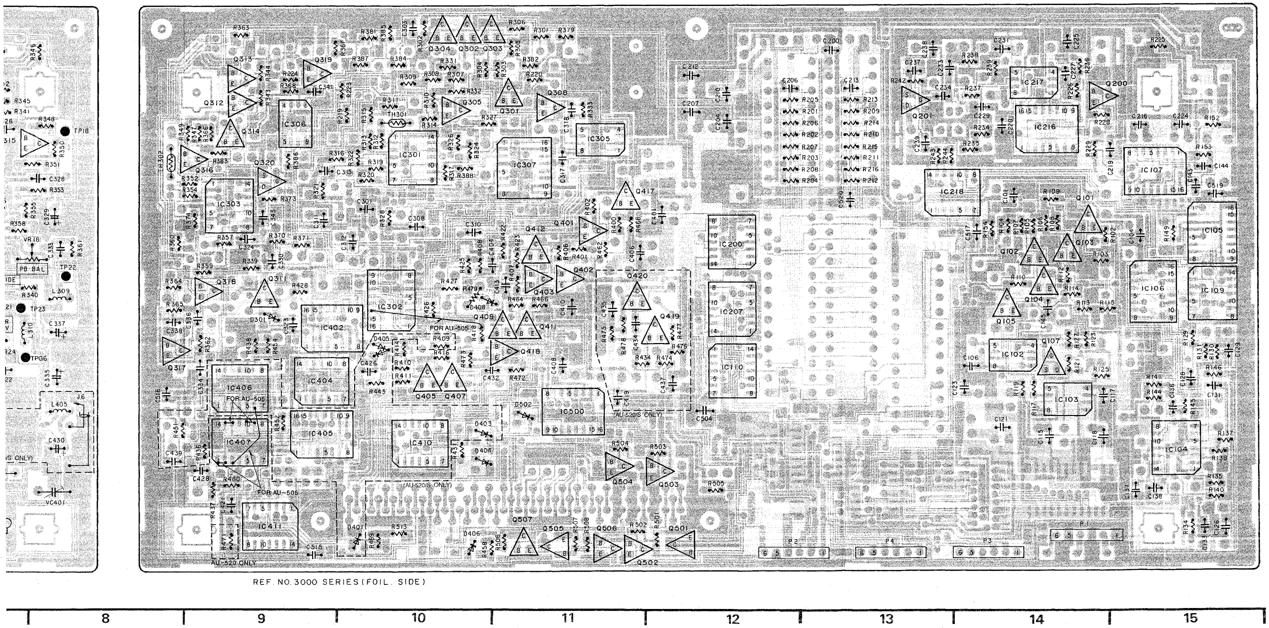
REF. NO. 3000 SERIES (COMPONENT SIDE)

REF. NO. 3000 SERIES (FOIL. SIDE

P.C. BOARD LOCATION


VIDEO 3 (ENC)
VIDEO 4

Effective from
Serial No. H9TNA0128 (FOR AU-505)

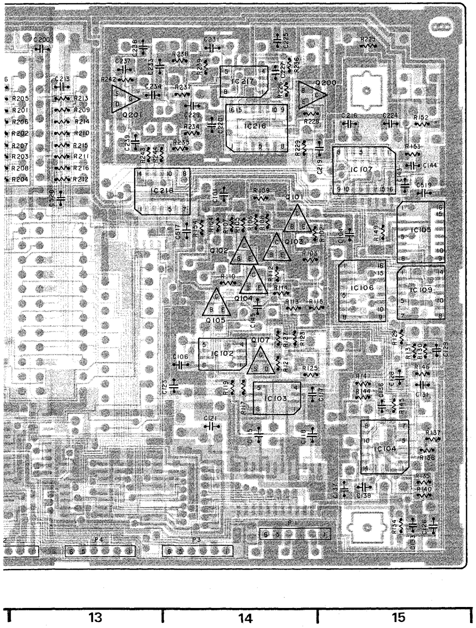

IC301
IC302
IC303
IC305
IC306
IC307
IC402
IC404
IC405
IC406
IC407
IC410
IC411
IC500
IC200
IC207
IC110
IC216
IC217
IC218
IC107
IC105
IC106
IC109
IC102
IC103
IC104
FOR AU-505
(AU-520/S ONLY)
AU-520 ONLY
PB BAL
TP18
TP22
TP23
TPG6
P1
P2
P3
P4
8
9
10
11
12
13
14
15

REF. NO. 3000 SERIES (FOIL SIDE)

	VIDE
Transistors	
Q3101	C-14
Q3102	C-14
Q3103	C-14
Q3104	C-14
Q3105	B-14
Q3106	B-2
Q3107	B-14
Q3108	B-1
Q3109	B-1
Q3110	A-1
Q3111	B-1
Q3200	D-14
Q3201	D-13
Q3301	D-11
Q3302	D-10
Q3303	D-11
Q3304	D-10
Q3305	D-10
Q3306	C-6
Q3307	C-6
Q3308	D-11
Q3309	D-5
Q3310	D-5
Q3311	C-9
Q3312	D-9
Q3313	D-9
Q3314	D-9
Q3315	D-7
Q3316	C-9
Q3317	B-8
Q3318	C-9
Q3319	D-9
Q3320	C-9
Q3321	C-7
Q3400	C-5
Q3401	C-11
Q3402	C-11
Q3403	C-11
Q3404	B-6
Q3405	B-10
Q3406	B-6
Q3407	B-10
Q3408	B-6
Q3409	B-10
Q3410	B-5
Q3411	B-11
Q3412	C-11
Q3414	B-6
Q3415	B-7
Q3416	B-6
Q3417	C-11
Q3418	B-11
Q3419	B-12
Q3420	C-11
Q3501	A-12
Q3502	A-11
Q3503	A-12
Q3504	A-11
Q3505	A-11
Q3506	A-11
Q3507	A-11
Q3508	A-4
Q3509	A-4
Q3510	B-4
Q3511	B-4
Integrated Circuits	
IC3102	B-14
IC3103	B-14
IC3104	B-15
IC3105	C-15
IC3106	C-15
IC3107	C-15
IC3108	C-1
IC3109	C-15
IC3110	B-12
IC3200	C-12
IC3201	C-4
IC3202	C-3
IC3203	A-2
IC3204	A-3

ADDRESS INFORMATION

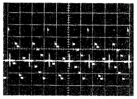
Effective from
Serial No. H9TNA0128 (FOR AU-505)



VIDEO 3 P.C.B.	
Transistors	
Q3101	C-14
Q3102	C-14
Q3103	C-14
Q3104	C-14
Q3105	B-14
Q3106	B-2
Q3107	B-14
Q3108	B-1
Q3109	B-1
Q3110	A-1
Q3111	B-1
Q3200	D-14
Q3201	D-13
Q3301	D-11
Q3302	D-10
Q3303	D-11
Q3304	D-10
Q3305	D-10
Q3306	C-6
Q3307	C-6
Q3308	D-11
Q3309	D-5
Q3310	D-5
Q3311	C-9
Q3312	D-9
Q3313	D-9
Q3314	D-9
Q3315	D-7
Q3316	C-9
Q3317	B-8
Q3318	C-9
Q3319	D-9
Q3320	C-9
Q3321	C-7
Q3400	C-5
Q3401	C-11
Q3402	C-11
Q3403	C-11
Q3404	B-6
Q3405	B-10
Q3406	B-6
Q3407	B-10
Q3408	B-6
Q3409	B-10
Q3410	B-5
Q3411	B-11
Q3412	C-11
Q3414	B-6
Q3415	B-7
Q3416	B-6
Q3417	C-11
Q3418	B-11
Q3419	B-12
Q3420	C-11
Q3501	A-12
Q3502	A-11
Q3503	A-12
Q3504	A-11
Q3505	A-11
Q3506	A-11
Q3507	A-11
Q3508	A-4
Q3509	A-4
Q3510	B-4
Q3511	B-4
Integrated Circuits	
IC3102	B-14
IC3103	B-14
IC3104	B-15
IC3105	C-15
IC3106	C-15
IC3107	C-15
IC3108	C-1
IC3109	C-15
IC3110	B-12
IC3200	C-12
IC3201	C-4
IC3202	C-3
IC3203	A-2
IC3204	A-3
IC3205	A-3
IC3206	B-3
IC3207	B-12
IC3208	B-4
IC3209	C-3
IC3210	C-4
IC3211	D-4
IC3212	D-3
IC3213	D-4
IC3214	D-4
IC3215	D-2
IC3216	D-14
IC3217	D-14
IC3218	C-14
IC3220	B-4
IC3221	C-1
IC3301	C-10
IC3302	B-10
IC3303	C-9
IC3305	D-11
IC3306	D-9
IC3307	C-11
IC3401	C-5
IC3402	B-9
IC3404	B-9
IC3405	B-9
IC3406	B-9
IC3407	B-9
IC3408	A-7
IC3409	B-6
IC3410	B-10
IC3411	A-9
IC3500	B-11
IC3510	A-2
Test Points	
TP3004	C-2
TP3005	B-1
TP3006	C-3
TP3010	C-2
TP3011	D-2
TP3012	B-3
TP3013	D-5
TP3014	D-7
TP3016	D-6
TP3017	C-5
TP3018	D-8
TP3019	B-5
TP3020	B-6
TP3021	C-7
TP3022	C-8
TP3023	B-8
TP3030	C-5
TP3032	B-7
TPG3004	D-5
TPG3005	C-6
TPG3006	B-8
TPG3008	B-1
TPG3009	C-4
TPG3010	B-5
TPG3011	C-2
Adjustments	
VR3003	C-2
VR3004	B-2
VR3007	D-1
VR3008	D-2
VR3011	D-6
VR3012	D-6
VR3013	C-7
VR3014	D-6
VR3015	D-5
VR3016	D-7
VR3017	D-7
VR3018	C-8
VR3019	D-7
VR3020	C-5
VR3021	B-7
VR3022	C-7
VR3023	D-6
VR3024	B-7
VR3025	B-6

ADDRESS INFORMATION

VIDEO 3 (ENCODER) WAVEFORMS


TP4
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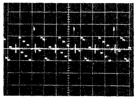
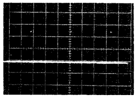
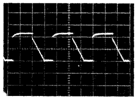
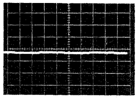
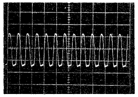
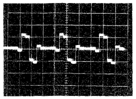

TP5
1V/20µsec. div.


TP6
2V/20µsec. div.


TP10
2V/20µsec. div.


TP11
2V/10µsec. div.


TP12
2V/0.1µsec. div.


TP13
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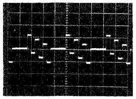
TP14
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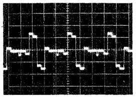
TP16
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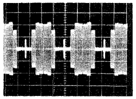
TP17
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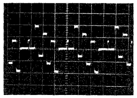
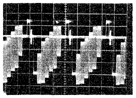
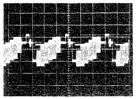

TP18
0.2V/20µsec. div.


TP19
0.5V/20µsec. div.


TP20
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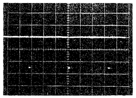
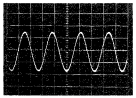
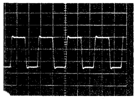
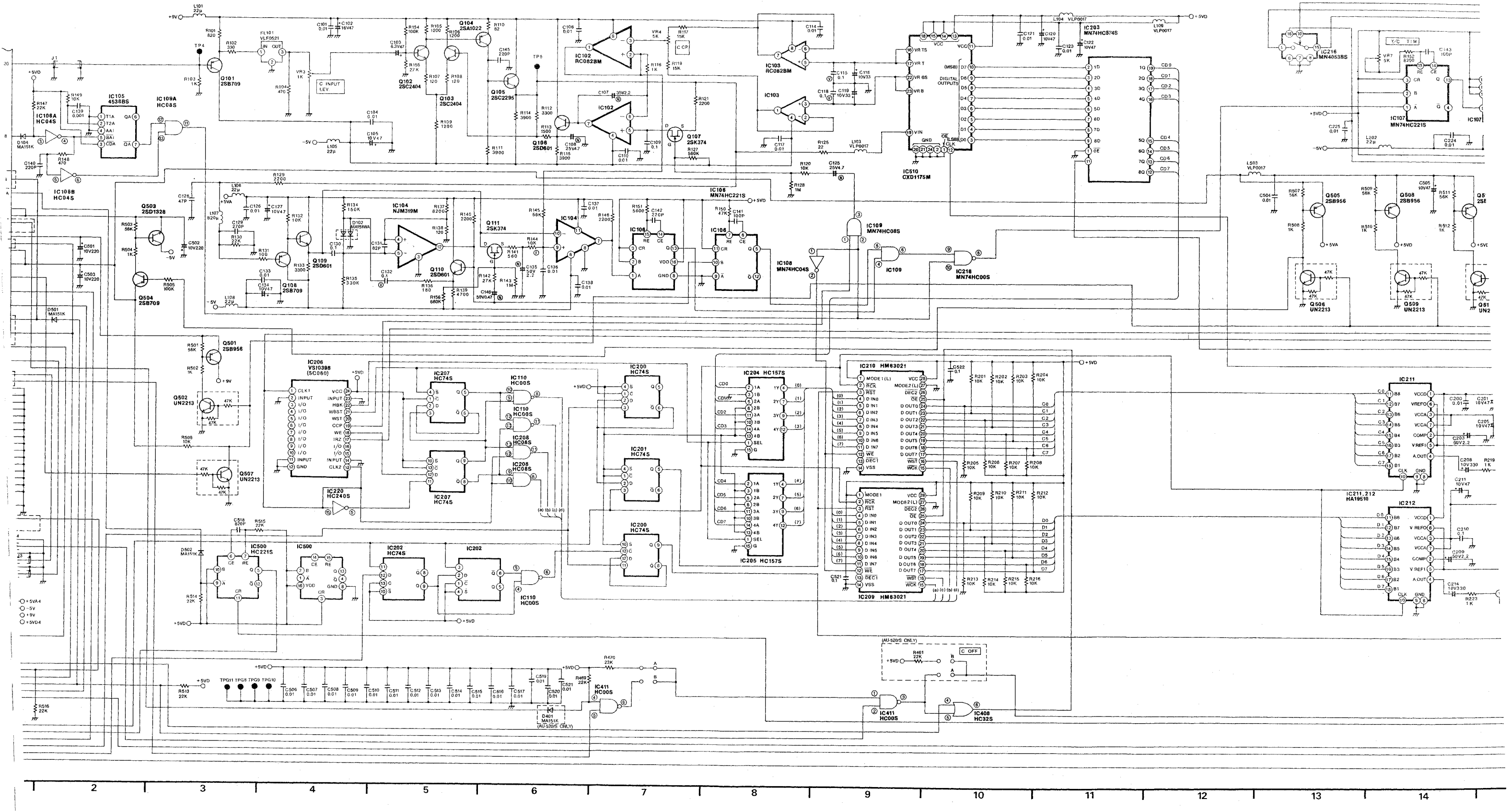

TP21
2V/20µsec. div.


TP22, TP23
0.2V/0.1µsec. div.


TP32
2V/0.1µsec. div.

SCHEMATIC DIAGRAM

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY



+9V
L101 22µ
TP4
Q101 2SB709
FL101 VLF0521
VR3 1K
C INPUT LEV
Q102 2SC2404
Q103 2SC2404
Q104 2SA1022
Q105 2SC2295
Q106 2SD601
TP5
IC102 RC082BM
VR4 5K
C CP
Q107 2SK374
IC103 RC082BM
IC510 CXD1175M
L104 VLP0017
IC203 MN74HC574S
L109 VLP0017
+5VD
IC216 MN4053BS
Y/C TIM
VR7 5K
IC107 MN74HC221S
IC105 4538BS
IC109A HC08S
IC106A HC04S
IC106B HC04S
D104 MA151K
Q503 2SD1328
IC104 NJM319M
D102 MA151WA
Q108 2SB709
Q109 2SD601
Q110 2SD601
Q111 2SK374
IC104
IC106
IC108 MN74HC221S
IC109 MN74HC08S
IC108 MN74HC04S
IC109
IC218 MN74HC00S
Q505 2SB956
Q508 2SB956
Q506 UN2213
Q509 UN2213
Q504 2SB709
D501 MA151K
Q501 2SB956
Q502 UN2213
Q507 UN2213
IC206 VS10398 (5C060)
IC207 HC74S
IC110 HC00S
IC208 HC08S
IC220 HC240S
IC200 HC74S
IC201 HC74S
IC204 HC157S
IC205 HC157S
IC210 HM63021
IC209 HM63021
IC211
IC212
IC211, 212 HA19510
D502 MA151K
IC500 HC221S
IC500
IC202 HC74S
IC202
IC110 HC00S
+5VA4
-5V
+9V
+5VD4
TPG11 TPG8 TPG9 TPG10
IC411 HC00S
D401 MA151K (AU-520/S ONLY)
(AU-520/S ONLY)
C OFF
IC408 HC32S
2
3
4
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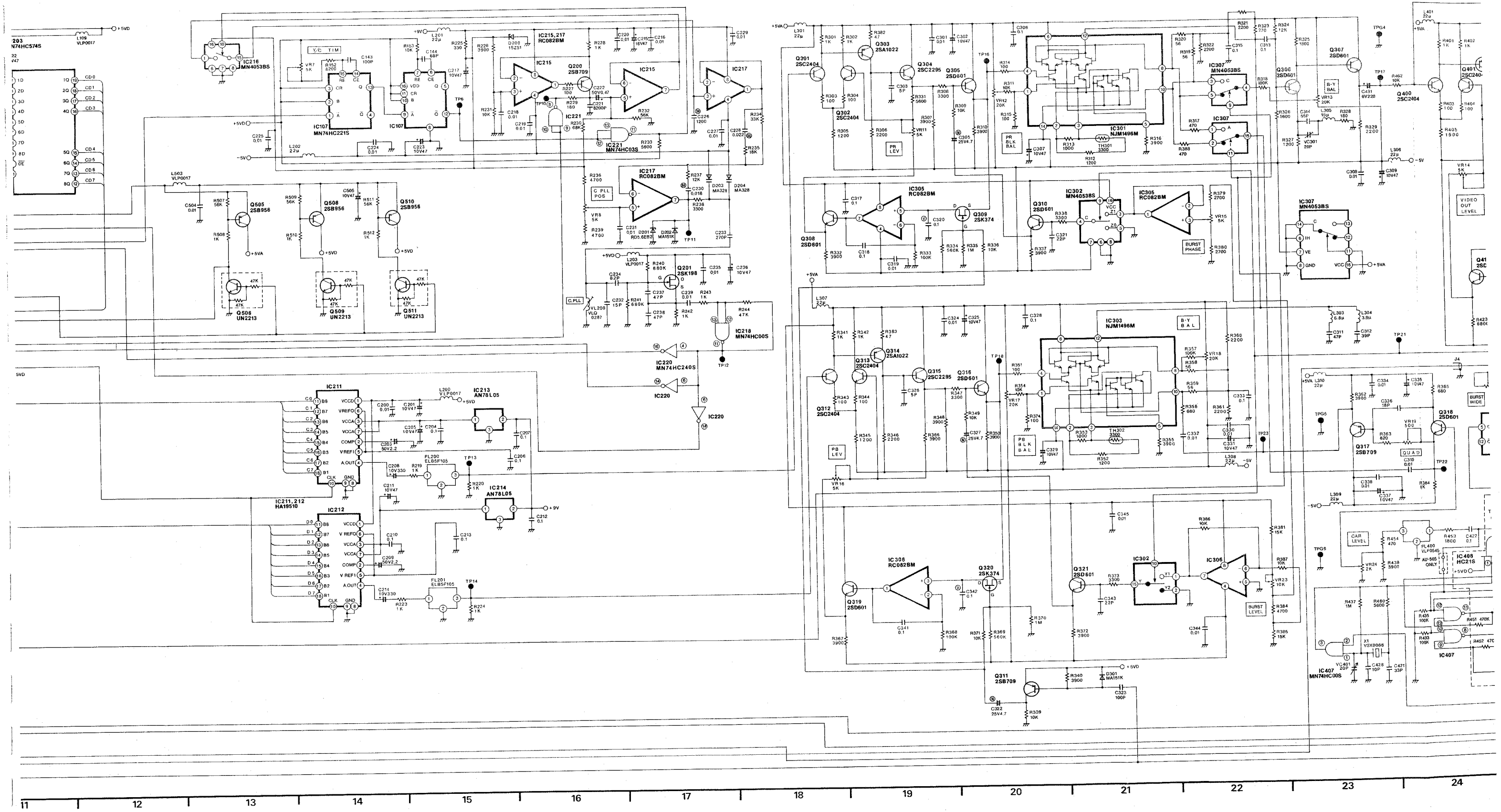
IC216 MN4053BS
IC107 MN74HC221S
Y/C TIM
IC215,217 RC082BM
IC215
Q200 2SB709
IC221 MN74HC03S
IC217
IC217 RC082BM
C PLL POS
Q505 2SB956
Q508 2SB956
Q510 2SB956
Q506 UN2213
Q509 UN2213
Q511 UN2213
Q201 2SK198
C.PLL
IC218 MN74HC00S
IC220 MN74HC240S
IC220
IC211
IC213 AN78L05
IC214 AN78L05
IC211,212 HA19510
IC212
FL200 ELB5F105
FL201 ELB5F105
TP6
TP10
TP11
TP12
TP13
TP14
+5VD
-5V
+9V
+5VA
Q301 2SC2404
Q302 2SC2404
Q303 2SA1022
Q304 2SC2295
Q305 2SD601
PR LEV
PR BLK BAL
IC301 NJM1496M
IC307 MN4053BS
IC307
Q306 2SD601
Q307 2SD601
B-Y BAL
Q400 2SC2404
Q401 2SC2404
VIDEO OUT LEVEL
TP4
TP16
TP17
Q308 2SD601
IC305 RC082BM
Q309 2SK374
Q310 2SD601
IC302 MN4053BS
IC305 RC082BM
BURST PHASE
IC307 MN4053BS
Q312 2SC2404
Q313 2SC2404
Q314 2SA1022
Q315 2SC2295
Q316 2SD601
IC303 NJM1496M
B-Y BAL
PB LEV
PB BLK BAL
TP18
TP21
TP22
TP23
TP5
TP6
Q317 2SB709
Q318 2SD601
QUAD
BURST WIDE
IC306 RC082BM
Q319 2SD601
Q320 2SK374
Q321 2SD601
IC302
IC306
BURST LEVEL
Q311 2SB709
CAR LEVEL
IC406 HC21S
AU-505 ONLY
IC407 MN74HC00S
IC407
X1 VSX0068
11
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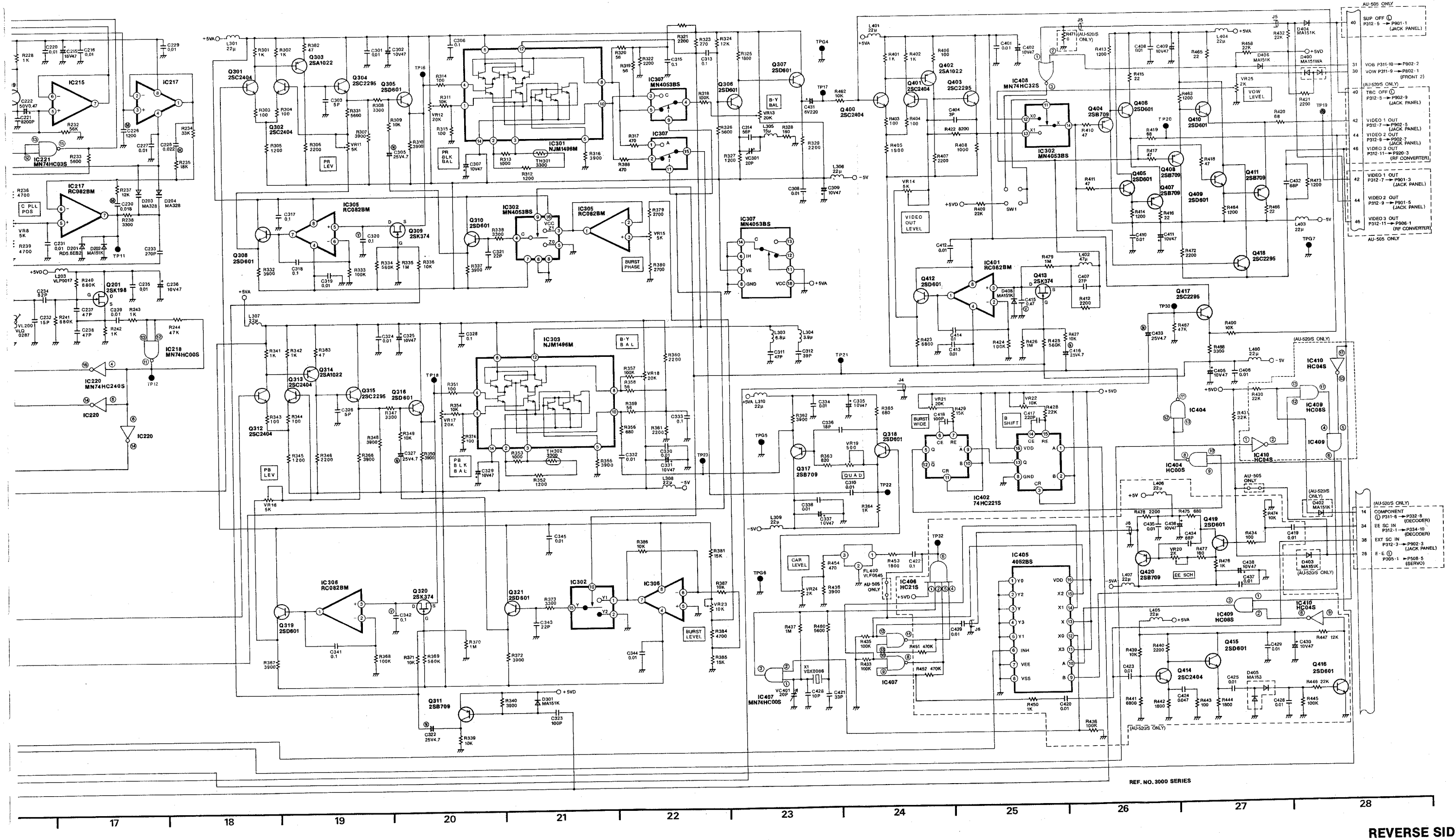
Effective from
Serial No. H9TNA0128 (FOR AU-505)


IC215
IC217
IC221 MN74HC03S
IC217 RC082BM
IC218 MN74HC00S
IC220 MN74HC240S
IC220
Q201 2SK198
Q301 2SC2404
Q302 2SC2404
Q303 2SA1022
Q304 2SC2295
Q305 2SD601
IC301 NJM1496M
IC307 MN4053BS
Q306 2SD601
Q307 2SD601
IC305 RC082BM
Q308 2SD601
Q309 2SK374
Q310 2SD601
IC302 MN4053BS
IC303 NJM1496M
Q312 2SC2404
Q313 2SC2404
Q314 2SA1022
Q315 2SC2295
Q316 2SD601
IC306 RC082BM
Q319 2SD601
Q320 2SK374
Q321 2SD601
Q311 2SB709
Q317 2SB709
Q318 2SD601
Q400 2SC2404
Q401 2SC2404
Q402 2SA1022
Q403 2SC2295
IC408 MN74HC32S
IC302 MN4053BS
Q404 2SB709
Q405 2SD601
Q406 2SD601
Q407 2SB709
Q408 2SB709
Q409 2SD601
Q410 2SD601
Q411 2SB709
Q412 2SD601
Q413 2SK374
IC401 RC082BM
Q417 2SC2295
Q418 2SC2295
IC402 74HC221S
IC404 HC00S
IC405 4052BS
IC406 HC21S
IC407 MN74HC00S
IC409 HC08S
IC410 HC04S
Q414 2SC2404
Q415 2SD601
Q416 2SD601
Q419 2SD601
Q420 2SB709
PR LEV
PR BLK BAL
B-Y BAL
BURST PHASE
PB LEV
PB BLK BAL
BURST LEVEL
VIDEO OUT LEVEL
VOW LEVEL
BURST WIDE
B SHIFT
QUAD
CAR LEVEL
EE SCH
AU-505 ONLY
SUP OFF
P312-5 → P901-1 (JACK PANEL)
VOB P311-10 → P802-2
VOW P311-9 → P802-1 (FRONT 2)
(AU-520/S ONLY)
TBC OFF
P312-5 → P902-9 (JACK PANEL)
VIDEO 1 OUT P312-7 → P902-5 (JACK PANEL)
VIDEO 2 OUT P312-9 → P902-7 (JACK PANEL)
VIDEO 3 OUT P312-11 → P920-3 (RF CONVERTER)
VIDEO 1 OUT P312-7 → P901-3 (JACK PANEL)
VIDEO2 OUT P312-9 → P901-5 (JACK PANEL)
VIDEO3 OUT P312-11 → P906-1 (RF CONVERTER)
AU-505 ONLY
(AU-520/S ONLY)
COMPONENT P311-6 → P332-8 (DECODER)
EE SC IN P312-1 → P334-10 (DECODER)
EXT SC IN P312-3 → P902-3 (JACK PANEL)
E-E P305-1 → P508-5 (SERVO)
17
18
19
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26
27
28

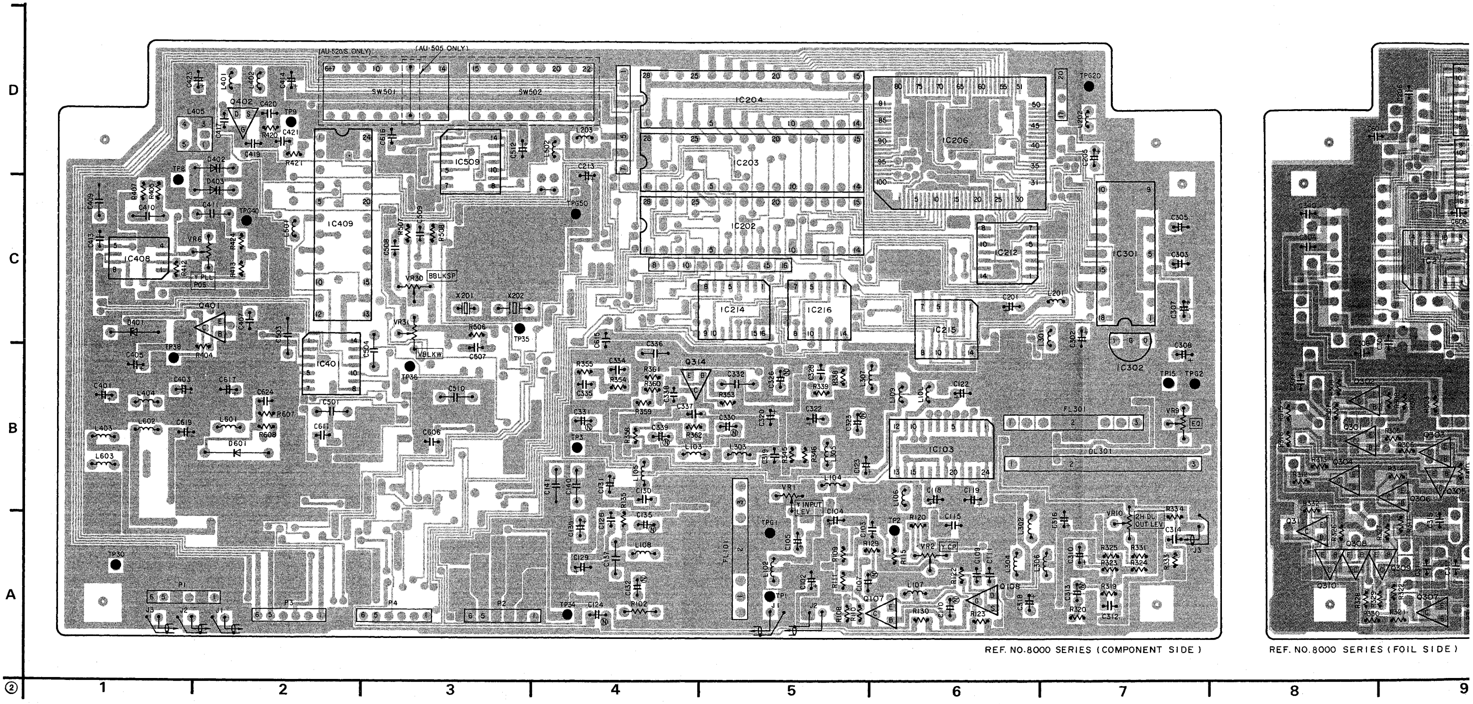
REF. NO. 3000 SERIES

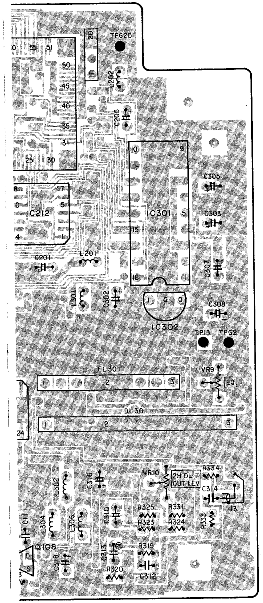
REVERSE SIDE

VIDEO 4 P.C.B.

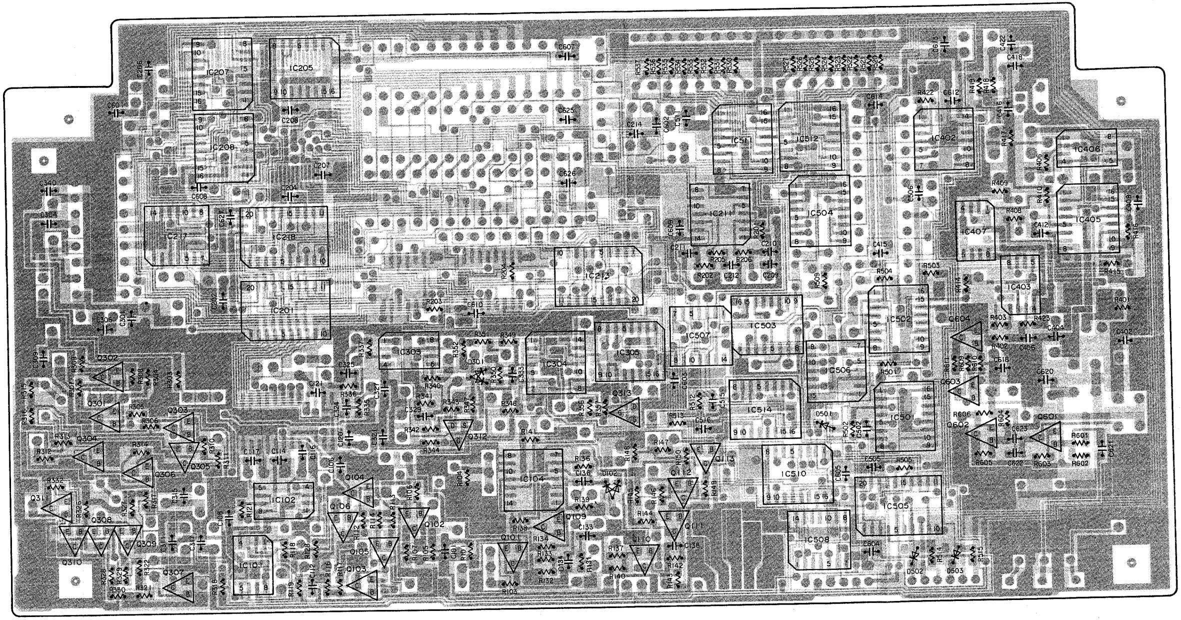
VIDEO 4 P.C. BOARD (VEP88052A) (FOR AU-520/S)
(VEP88052B) (FOR AU-505)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


(AU-520/S ONLY)
(AU-505 ONLY)
SW501
SW502
IC204
IC203
IC202
IC206
IC409
IC408
IC509
IC40
IC212
IC214
IC216
IC215
IC301
IC302
IC103
Q402
Q401
Q314
Q107
Q108
FL301
DL301
FL101
VR6
VR30
VR31
VR1
VR2
VR9
VR10
X201
X202
BBLKSP
VBLKW
Y PLL POS
Y INPUT LEV
Y CP
2H DL OUT LEV
EQ
TP8
TP9
TPG40
TPG50
TPG20
TP35
TP36
TP38
TP15
TPG2
TP3
TPG1
TP2
TP1
TP30
TP34
P1
P2
P3
P4
J1
J2
J3
REF. NO.8000 SERIES (COMPONENT SIDE)
REF. NO.8000 SERIES (FOIL SIDE)
D
C
B
A
②
1
2
3
4
5
6
7
8
9

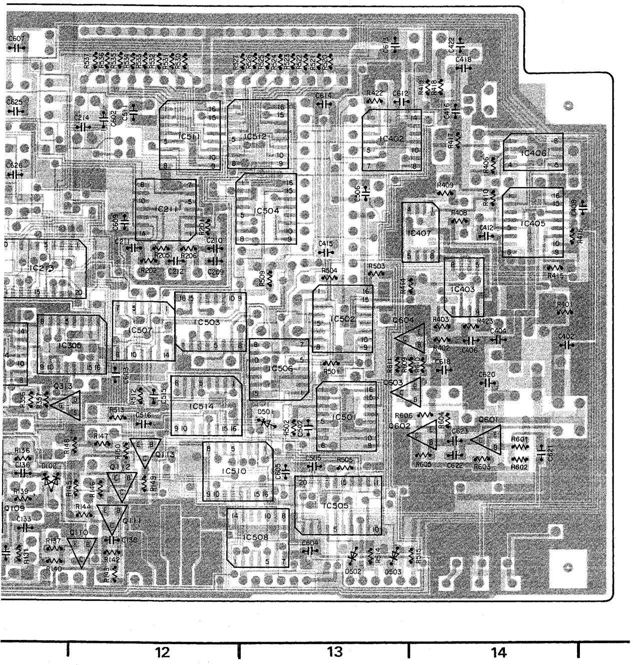

IC212
IC301
IC302
L201
L202
L301
L302
L304
L306
C201
C205
C302
C303
C305
C307
C308
C310
C312
C313
C314
C316
C318
C111
TPG20
TP15
TPG2
FL301
DL301
VR9
EQ
VR10
2H DL
OUT LEV
R319
R320
R323
R324
R325
R331
R333
R334
J3
Q108

REF. NO.8000 SERIES (COMPONENT SIDE)


IC207
IC205
IC208
IC217
IC218
IC201
IC213
IC211
IC511
IC512
IC504
IC402
IC406
IC405
IC407
IC403
IC303
IC304
IC305
IC507
IC503
IC502
IC506
IC514
IC501
IC510
IC505
IC508
IC104
IC102
IC101
Q301
Q302
Q303
Q304
Q305
Q306
Q307
Q308
Q309
Q310
Q311
Q312
Q313
Q101
Q102
Q103
Q104
Q105
Q106
Q109
Q110
Q111
Q112
Q113
Q601
Q602
Q603
Q604
D301
D102
D501
D502
D503

REF. NO.8000 SERIES (FOIL SIDE)

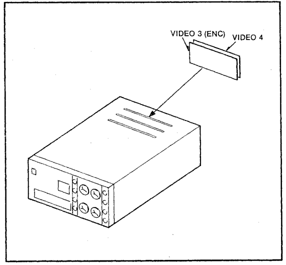
7 8 9 10 11 12 13 14


IC511
IC512
IC402
IC406
IC211
IC504
IC407
IC405
IC213
IC403
IC503
IC502
IC507
IC305
IC506
IC514
IC501
IC510
IC505
IC508
Q313
Q604
Q603
Q602
Q601
Q112
Q111
Q110
Q109
12
13
14

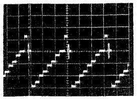
VIDEO 4 P.C.B.	
Transistors	
Q8101	A-11
Q8102	A-10
Q8103	A-10
Q8104	B-10
Q8105	A-10
Q8106	A-10
Q8107	A-6
Q8108	A-6
Q8109	A-11
Q8110	A-12
Q8111	A-12
Q8112	A-12
Q8113	B-12
Q8301	B-8
Q8302	B-8
Q8303	B-9
Q8304	B-8
Q8305	B-9
Q8306	B-9
Q8307	A-9
Q8308	A-8
Q8309	A-9
Q8310	A-8
Q8311	A-8
Q8312	B-11
Q8313	B-11
Q8314	B-4
Q8401	C-2
Q8402	D-2
Q8601	B-14
Q8602	B-14
Q8603	B-13
Q8604	B-13
Integrated Circuits	
IC8101	A-9
IC8102	A-10
IC8103	B-6
IC8104	A-11
IC8105	A-12
IC8106	A-13
IC8201	C-9
IC8202	C-5
IC8203	D-5
IC8204	D-5
IC8205	D-10
IC8206	D-6
IC8207	D-9
IC8208	D-9
IC8211	C-12
IC8212	C-6
IC8213	C-11
IC8214	C-5
IC8215	C-6
IC8216	C-5
IC8217	C-9
IC8218	C-9
IC8301	C-7
IC8302	B-7
IC8303	B-10
IC8304	B-11
IC8305	B-11
IC8401	B-2
IC8402	C-13
IC8403	C-14
IC8405	C-14
IC8406	C-14
IC8407	C-14
IC8408	C-1
IC8409	C-2
IC8501	B-13
IC8502	B-13
IC8503	B-12
IC8504	C-13
IC8505	A-13
IC8506	B-13
IC8507	B-12
IC8508	A-13
IC8509	D-3
IC8510	A-12
IC8511	C-12
IC8512	C-13
IC8514	B-12
Test Points	
TP8001	A-5
TP8002	A-6
TP8003	B-4
TP8008	D-1
TP8009	D-2
TP8015	B-7
TP8030	A-1
TP8031	B-2
TP8034	A-4
TP8035	C-3
TP8036	B-3
TP8038	B-1
TPG8001	A-5
TPG8002	B-7
TPG8020	D-7
TPG8040	C-2
TPG8050	C-4
Adjustments	
VR8001	B-5
VR8002	A-6
VR8006	C-2
VR8009	B-7
VR8010	A-7
VR8030	C-3
VR8031	C-3

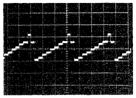
ADDRESS INFORMATION

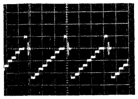
P.C. BOARD LOCATION

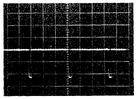

VIDEO 3 (ENC)
VIDEO 4

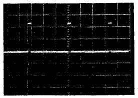
VIDEO 4 WAVEFORMS

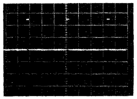

TP1
0.5V/20μsec. div.

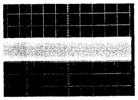

TP30
0.5V/10μsec. div.

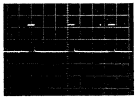

TP2
0.5V/20μsec. div.

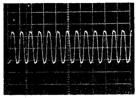

TP34
2V/20μsec. div.

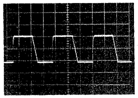

TP3
2V/20μsec. div.

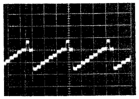

TP35
2V/20μsec. div.


TP8
0.2V/20μsec. div.


TP36
2V/20μsec. div.

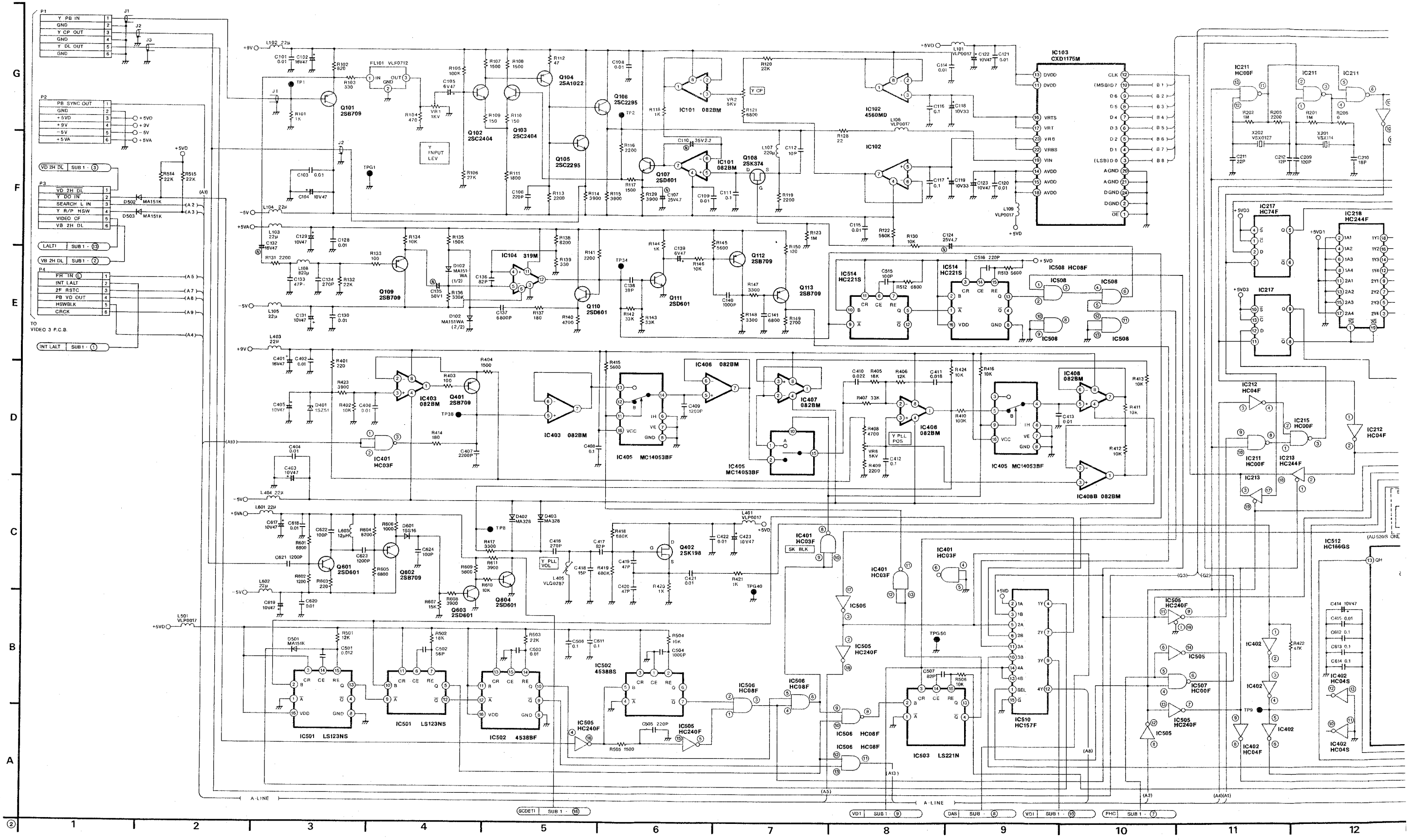

TP9
2V/0.1μsec. div.


TP38
2V/20μsec. div.

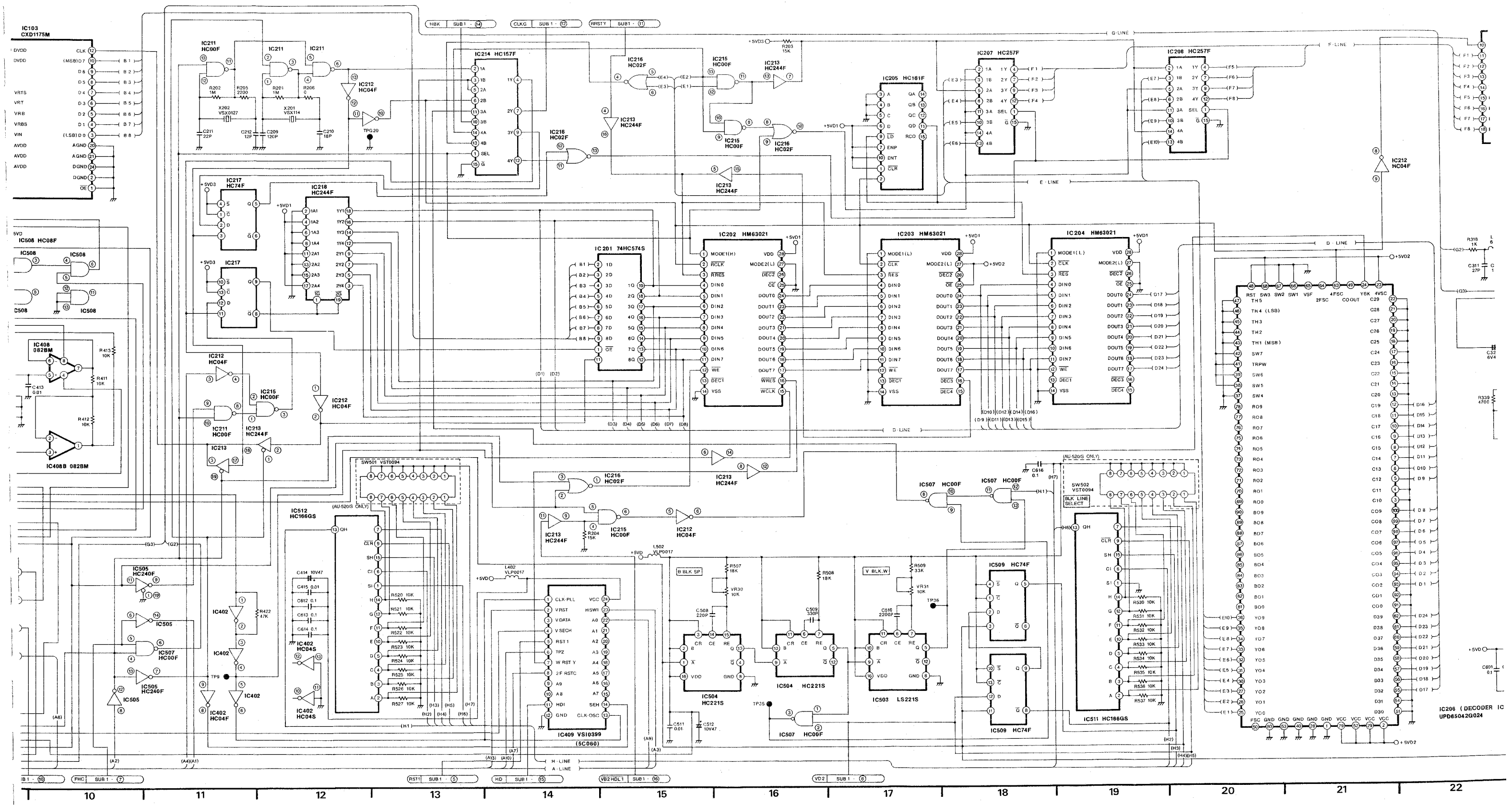

TP15
0.2V/20μsec. div.

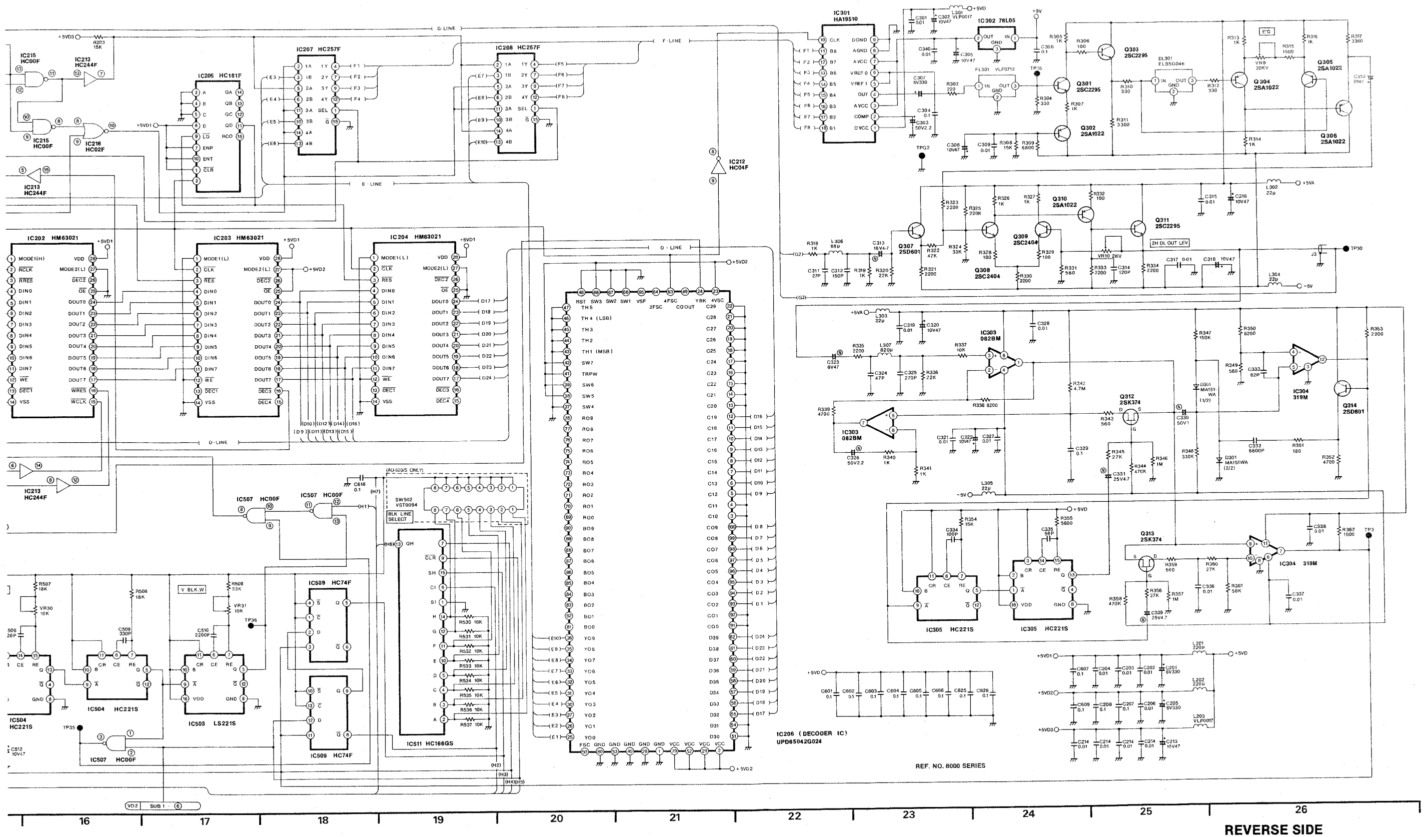
VIDEO 4 SCHEMATIC DIAGRAM

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY



P1
Y PB IN
GND
Y CP OUT
GND
Y DL OUT
GND
P2
PB SYNC OUT
GND
+5VD
+9V
-5V
+5VA
P3
VD 2H DL
Y DO IN
SEARCH L IN
Y R/P HSW
VIDEO CF
VB 2H DL
P4
FR IN
INT LALT
2F RSTC
PB VD OUT
HSWBLK
CRCK
TO VIDEO 3 P.C.B.
Q101 2SB709
Q102 2SC2404
Q103 2SC2404
Q104 2SA1022
Q105 2SC2295
Q106 2SC2295
Q107 2SD601
Q108 2SK374
Q109 2SB709
Q110 2SD601
Q111 2SD601
Q112 2SB709
Q113 2SB709
IC101 082BM
IC102 4560MD
IC103 CXD1175M
IC104 319M
FL101 VLF0712
Y INPUT LEV
Y CP
IC211 HC00F
IC217 HC74F
IC218 HC244F
IC514 HC221S
IC508 HC08F
IC401 HC03F
IC403 082BM
Q401 2SB709
IC405 MC14053BF
IC406 082BM
IC407 082BM
IC408 082BM
IC408B 082BM
Y PLL POS
IC212 HC04F
IC215 HC00F
IC213 HC244F
Q601 2SD601
Q602 2SB709
Q603 2SD601
Q604 2SD601
Q402 2SK198
Y PLL VOL
SK BLK
IC505 HC240F
IC510 HC157F
IC512 HC166GS
IC501 LS123NS
IC502 4538BF
IC506 HC08F
IC503 LS221N
IC507 HC00F
IC402 HC04S
A-LINE
SCDETI SUB 1 ⑯
VD1 SUB 1 ⑨
DAS SUB ⑧
VG1 SUB 1 ⑩
PHC SUB 1 ⑦
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12


IC103 CXD1175M
IC211 HC00F
IC212 HC04F
TPG20
IC214 HC157F
IC216 HC02F
IC215 HC00F
IC213 HC244F
IC205 HC161F
IC207 HC257F
IC208 HC257F
G-LINE
F-LINE
E-LINE
D-LINE
H-LINE
A-LINE
HBK SUB1-⑭
CLKG SUB1-⑫
RRSTY SUB1-⑪
+5VD3
R203 15K
IC217 HC74F
IC217
IC218 HC244F
IC508 HC08F
IC508
IC408 082BM
IC408B 082BM
IC201 74HC574S
IC202 HM63021
IC203 HM63021
IC204 HM63021
+5VD1
+5VD2
IC206 (DECODER IC UPD65042G024
SW501 VST0094
SW502 VST0094
(AU-520/S ONLY)
BLK LINE SELECT
IC512 HC166GS
IC511 HC166GS
IC409 VSI0399 (5C060)
L402 VLP0017
L502 VLP0017
IC505 HC240F
IC507 HC00F
IC402 HC04S
IC402 HC04F
IC504 HC221S
IC503 LS221S
IC509 HC74F
B BLK SP
V BLK W
TP9
TP35
TP36
R507 18K
R508 18K
R509 33K
VR30 10K
VR31 10K
C508 220P
C509 330P
C510 2200P
C511 0.01
C512 10V47
C616 0.1
R422 47K
R204 15K
R318 1K
C311 27P
R339 4700
C601 0.1
X202 VSX0127
X201 VSX114
R202 1M
R205 2200
R201 1M
R206 0
C211 22P
C212 12P
C209 120P
C210 18P
R413 10K
R411 10K
R412 10K
C413 0.01
C414 10V47
C415 0.01
C612 0.1
C613 0.1
C614 0.1
R520 10K
R521 10K
R522 10K
R523 10K
R524 10K
R525 10K
R526 10K
R527 10K
R530 10K
R531 10K
R532 10K
R533 10K
R534 10K
R535 10K
R536 10K
R537 10K
SUB1-⑩
FHC SUB1-⑦
RST1 SUB1-⑤
HD SUB1-⑮
VB2 HDL1 SUB1-⑯
VD2 SUB1-⑧
10
11
12
13
14
15
16
17
18
19
20
21
22


G-LINE
F-LINE
E-LINE
D-LINE
IC215 HC00F
IC213 HC244F
IC216 HC02F
IC205 HC151F
IC207 HC257F
IC208 HC257F
IC212 HC04F
IC202 HM63021
IC203 HM63021
IC204 HM63021
IC301 HA19510
IC302 78L05
FL301 VLF0712
DL301 EL05G046
Q301 2SC2295
Q302 2SA1022
Q303 2SC2295
Q304 2SA1022
Q305 2SA1022
Q306 2SA1022
Q307 2SD601
Q308 2SC2404
Q309 2SC2404
Q310 2SA1022
Q311 2SC2295
2H DL OUT LEV
TP30
TP15
TPG2
IC303 082BM
IC304 319M
Q312 2SK374
Q313 2SK374
Q314 2SD601
D301 MA151WA
IC305 HC221S
IC507 HC00F
SW502 VST0094
BLK LINE SELECT
(AU-620/S ONLY)
IC206 (DECODER IC)
UPD65042G024
IC509 HC74F
IC511 HC166GS
IC504 HC221S
IC503 LS221S
V BLK.W
TP35
TP36
TP3
REF. NO. 8000 SERIES
VD2 SUB 1 ⑥
16
17
18
19
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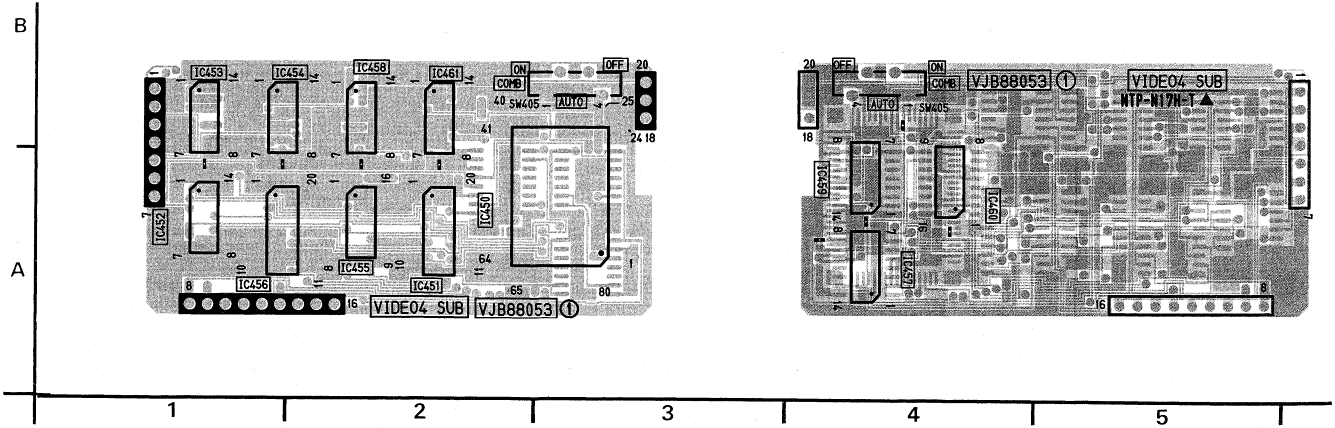
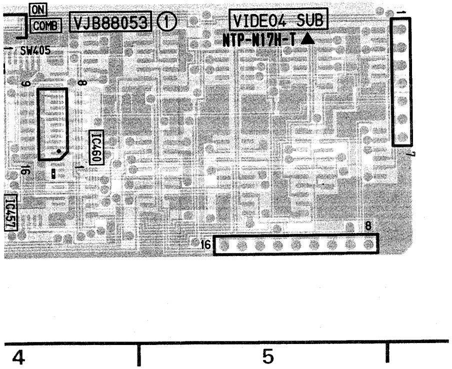
21
22
23
24
25
26

REVERSE SIDE

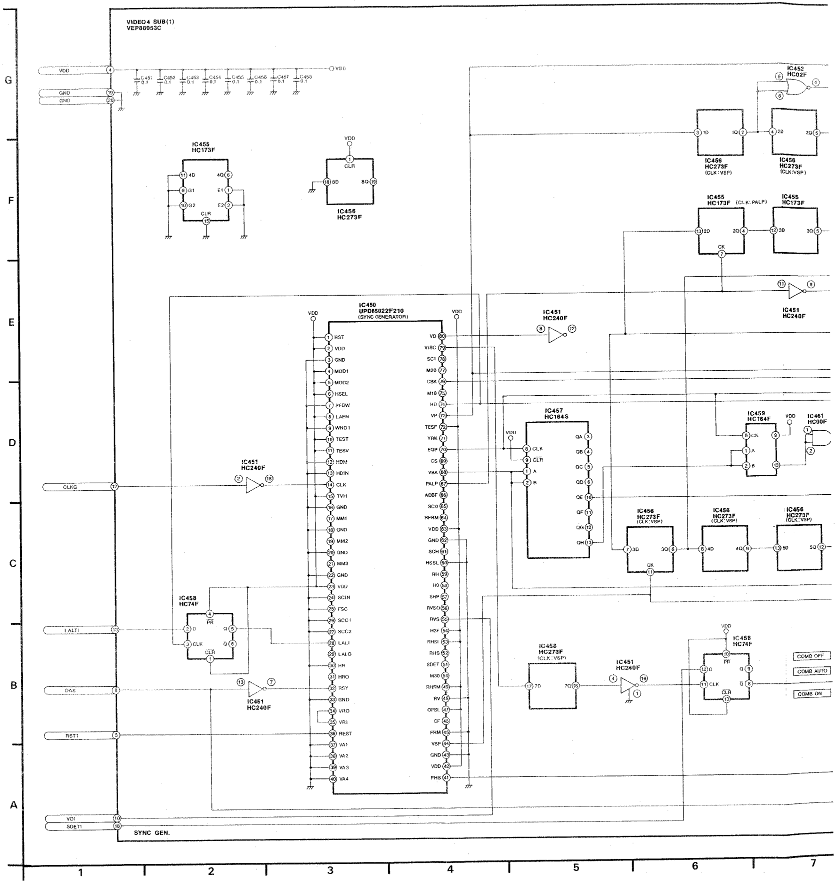
VIDEO 4 SUB (1) P.C.B.
VIDEO 4 SUB (1) SCHEMATIC DIAGRAM

VIDEO 4 SUB (1) P.C. BOARD (VEP88053C) (PART OF VEP88052A)

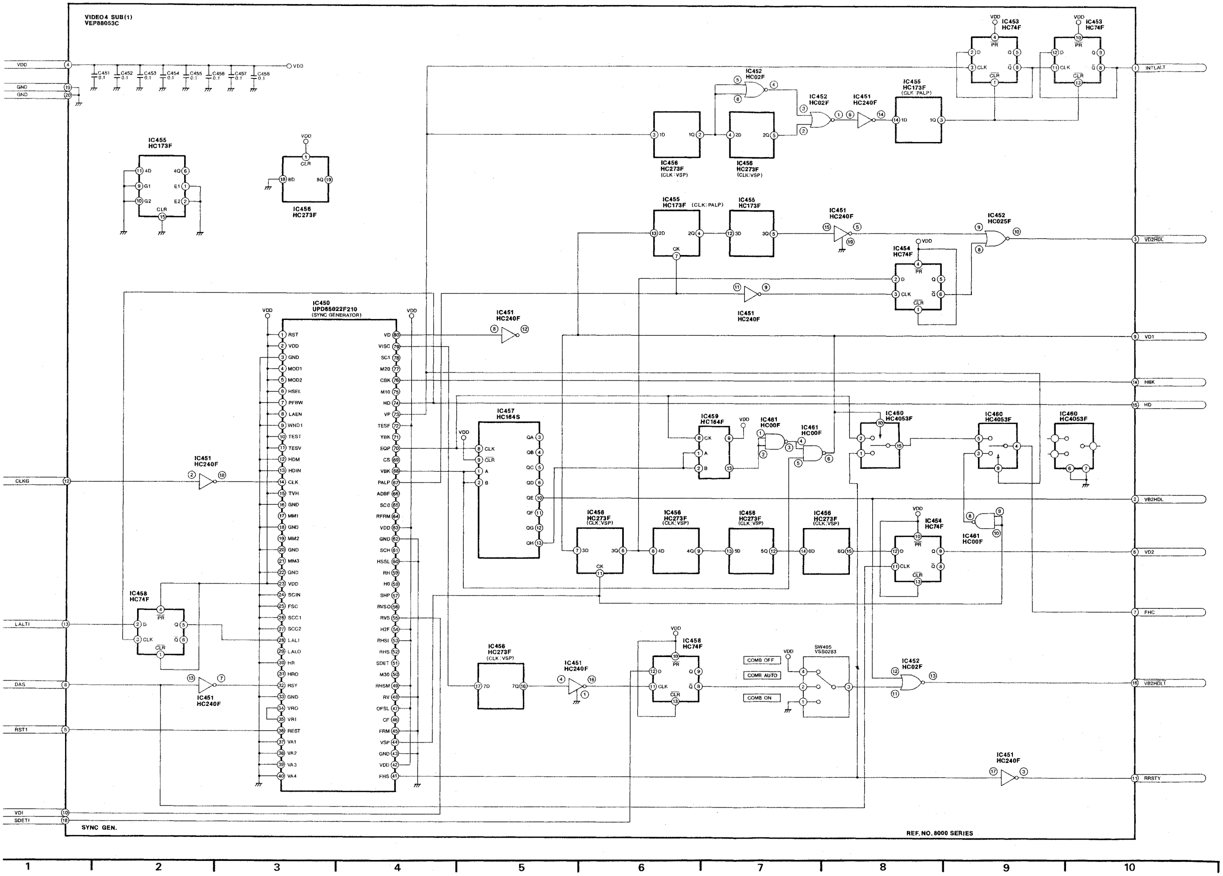

B
A
1
2
3
4
5
IC453
IC454
IC458
IC461
IC452
IC456
IC455
IC451
IC450
ON
OFF
COMB
AUTO
SW405
VIDEO4 SUB
VJB88053 ①
IC459
IC460
IC457
NTP-N17H-T


ON
COMB
VJB88053 ①
VIDEO4 SUB
NTP-N17H-T
SW405
9
8
IC460
16
IC457
1
7
8
16
4
5

VIDEO 4 SUB (1) SCHEMATIC DIAGRAM


VIDEO4 SUB(1)
VEP88053C
VDD
GND
GND
C451 0.1
C452 0.1
C453 0.1
C454 0.1
C455 0.1
C456 0.1
C457 0.1
C458 0.1
IC455
HC173F
IC456
HC273F
IC456
HC273F
(CLK:VSP)
IC452
HC02F
IC455
HC173F (CLK:PALP)
IC451
HC240F
IC450
UPD65022F210
(SYNC GENERATOR)
RST
VDD
GND
MOD1
MOD2
HSEL
PFBW
LAEN
WND1
TEST
TESV
HDM
HDIN
CLK
TVH
GND
MM1
GND
MM2
GND
MM3
GND
VDD
SCIN
FSC
SCC1
SCC2
LALI
LALO
HR
HRO
RSY
GND
VRO
VRI
REST
VA1
VA2
VA3
VA4
VD
VISC
SC1
M20
CBK
M10
HD
VP
TESF
YBK
EQP
CS
VBK
PALP
ADBF
SC0
RFRM
VDD
GND
SCH
HSSL
RH
HO
SHP
RVSG
RVS
H2F
RHSI
RHS
SDET
M30
RHSM
RV
CFSL
CF
FRM
VSP
GND
VDD
FHS
IC457
HC164S
IC459
HC164F
IC461
HC00F
IC458
HC74F
CLKG
LALT1
DAS
RST1
VD1
SDET1
SYNC GEN.
COMB OFF
COMB AUTO
COMB ON
G
F
E
D
C
B
A
1
2
3
4
5
6
7

O 4 SUB (1) SCHEMATIC DIAGRAM



VIDEO4 SUB(1)
VEP88053C
VDD
GND
GND
C451 0.1
C452 0.1
C453 0.1
C454 0.1
C455 0.1
C456 0.1
C457 0.1
C458 0.1
IC455 HC173F
IC456 HC273F
CLR
IC450 UPD65022F210 (SYNC GENERATOR)
RST
VDD
GND
MOD1
MOD2
HSEL
PFRW
LAEN
WND1
TEST
TESV
HDM
HDIN
CLK
TVH
GND
MM1
GND
MM2
GND
MM3
GND
VDD
SCIN
FSC
SCC1
SCC2
LALI
LALO
HR
HRO
HSY
GND
VRO
VRI
REST
VA1
VA2
VA3
VA4
VD
VISC
SC1
M20
CBK
M10
HD
VP
TESF
YBK
EQP
CS
VBK
PALP
ADBF
SC0
RFRM
VDD
GND
SCH
HSSL
RH
H0
SHP
RVSO
RVS
H2F
RHSI
RHS
SDET
M30
RHSM
RV
OFSL
CF
FRM
VSP
GND
VDD
FHS
IC451 HC240F
IC452 HC02F
IC452 HC025F
IC453 HC74F
IC454 HC74F
IC455 HC173F (CLK: PALP)
IC456 HC273F (CLK: VSP)
IC457 HC164S
IC458 HC74F
IC459 HC164F
IC460 HC4053F
IC461 HC00F
SW405 VSS0283
COMB OFF
COMB AUTO
COMB ON
CLKG
LALTI
DAS
RST1
VDI
SDETI
INTLALT
VD2HDL
VD1
HBK
HD
VB2HDL
VD2
FHC
VB2HDLT
RRSTY
SYNC GEN.
REF. NO. 8000 SERIES
1
2
3
4
5
6
7
8
9
10

PLAY HEAD AMP P.C. BOARD (VEP05088C) (FOR AU-520/S ONLY)

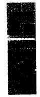
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

HEAD AMP P.C.B.	
Transistor	
Q3001	B-5
Q3002	B-5
Q3003	A-1
Q3004	C-5
Q3005	B-5
Q3006	B-2
Integrated Circuit	
IC3001	A-1
IC3002	B-2
IC3003	B-3
Test Point	
TP3001	A-1
TP3002	B-2
TP3003	A-2
TP3004	C-2
TPG1	C-2

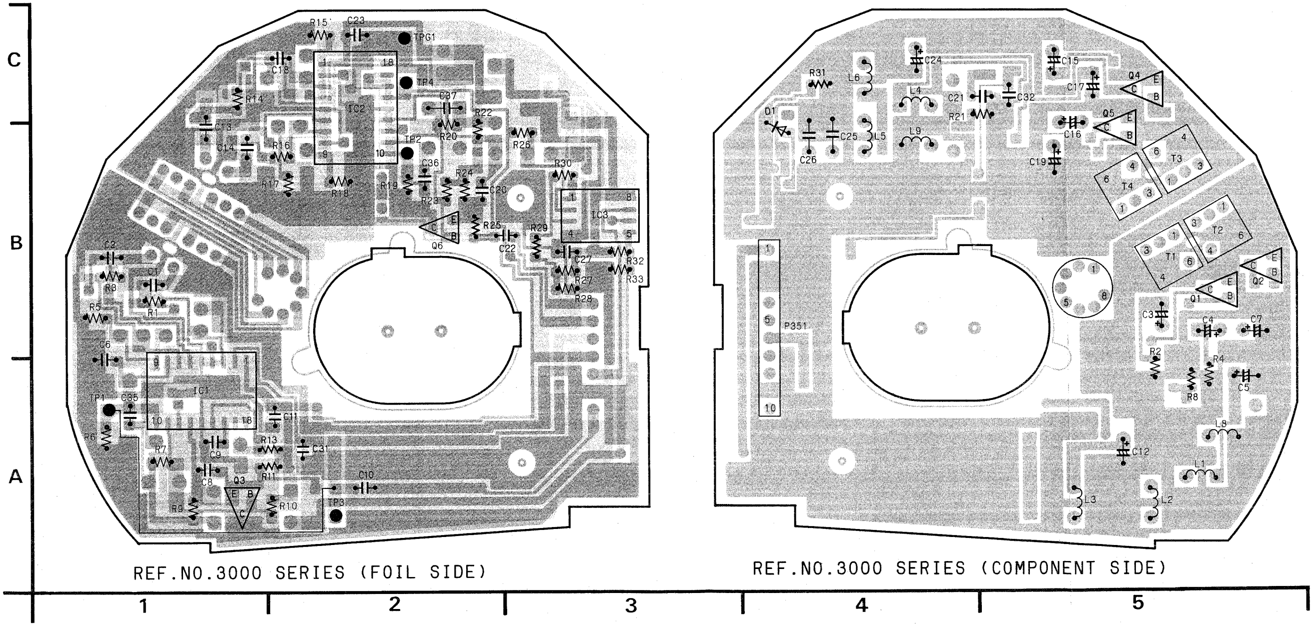
ADDRESS INFORMATION

HEAD AM

TP1/
50m



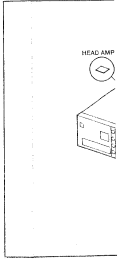
TP3
2V/C


C
B
A
R15
C23
TPG1
C18
TP4
R14
IC2
C37
C13
R22
C14
R16
TP2
R20
R26
R17
R18
R19
C36
R24
R23
C20
R30
IC3
C2
C1
R3
R5
R1
Q6
R25
C22
R29
C27
R27
R28
R32
R33
C6
IC1
TP1
C35
C11
R6
R7
R13
C9
C31
C8
Q3
R11
C10
R9
R10
TP3
R31
L6
C24
C15
C17
Q4
L4
C21
C32
R21
D1
C26
C25
L5
L9
C16
Q5
C19
T3
T4
T2
T1
Q2
Q1
P351
C3
C4
C7
R2
R4
C5
R8
L8
C12
L1
L3
L2
1
2
3
4
5

REF.NO.3000 SERIES (FOIL SIDE)

REF.NO.3000 SERIES (COMPONENT SIDE)

P.C. BOARD LOCATION

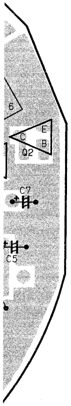


-5
-5
-1
-5
-5
-2

-1
-2
-3

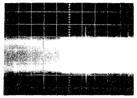
-1
-2
-2
-2
-2

ION

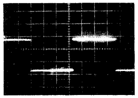


6
C
E
B
Q2
C7
C5

HEAD AMP WAVEFORMS

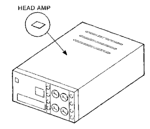


TP1/TP2
50mV/0.5msec. div.



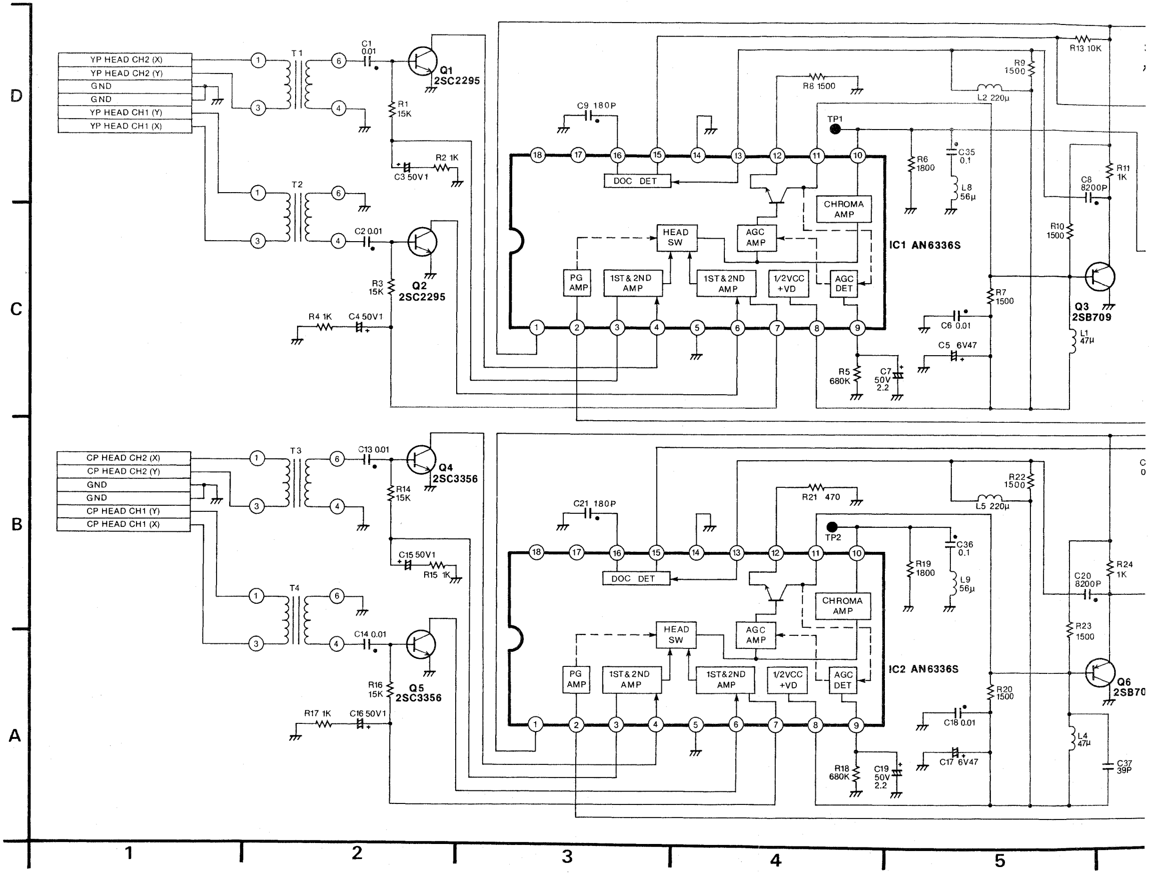
TP3
2V/0.5msec. div.

P.C. BOARD LOCATION



PLAY HEAD AMP SCHEMATIC DIAGRAM (FOR AU-520/S ONLY)

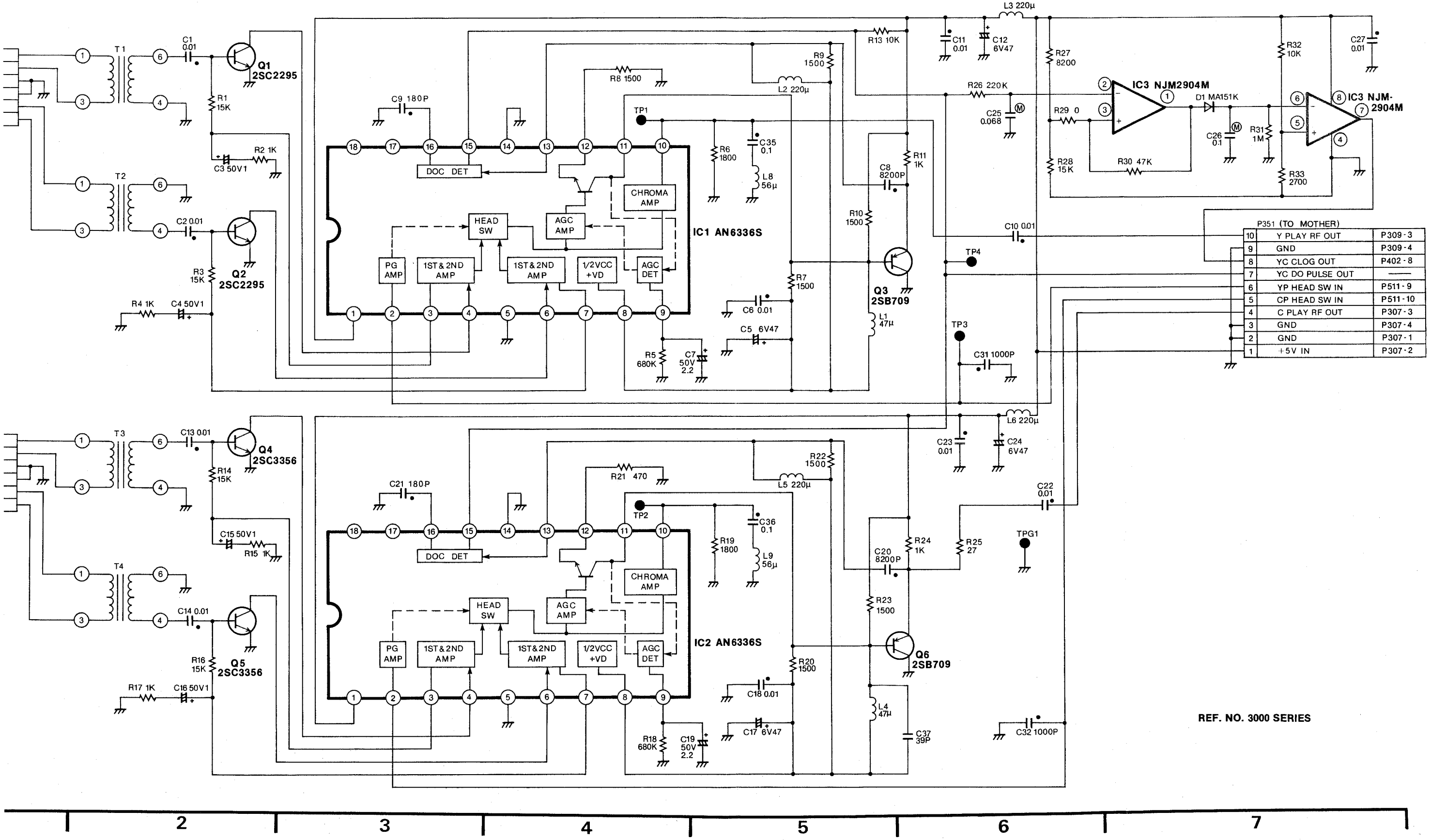
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY



D
C
B
A
1
2
3
4
5
YP HEAD CH2 (X)
YP HEAD CH2 (Y)
GND
GND
YP HEAD CH1 (Y)
YP HEAD CH1 (X)
T1
T2
C1 0.01
Q1 2SC2295
R1 15K
R2 1K
C3 50V1
C2 0.01
R3 15K
Q2 2SC2295
R4 1K
C4 50V1
C9 180P
R8 1500
TP1
DOC DET
HEAD SW
AGC AMP
CHROMA AMP
PG AMP
1ST & 2ND AMP
1ST & 2ND AMP
1/2VCC +VD
AGC DET
IC1 AN6336S
R5 680K
C7 50V 2.2
R6 1800
C35 0.1
L8 56μ
R9 1500
L2 220μ
R13 10K
R11 1K
C8 8200P
R10 1500
R7 1500
C6 0.01
C5 6V47
Q3 2SB709
L1 47μ
CP HEAD CH2 (X)
CP HEAD CH2 (Y)
GND
GND
CP HEAD CH1 (Y)
CP HEAD CH1 (X)
T3
T4
C13 0.01
Q4 2SC3356
R14 15K
C15 50V1
R15 1K
C14 0.01
R16 15K
Q5 2SC3356
R17 1K
C16 50V1
C21 180P
R21 470
TP2
IC2 AN6336S
R18 680K
C19 50V 2.2
R19 1800
C36 0.1
L9 56μ
R22 1500
L5 220μ
R24 1K
C20 8200P
R23 1500
R20 1500
C18 0.01
C17 6V47
Q6 2SB70
L4 47μ
C37 39P

P SCHEMATIC DIAGRAM (FOR AU-520/S ONLY)

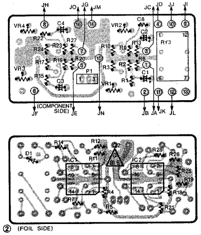
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


T1
T2
T3
T4
C1 0.01
Q1 2SC2295
R1 15K
R2 1K
C3 50V1
C2 0.01
Q2 2SC2295
R3 15K
R4 1K
C4 50V1
C9 180P
R8 1500
DOC DET
HEAD SW
AGC AMP
CHROMA AMP
PG AMP
1ST & 2ND AMP
1ST & 2ND AMP
1/2VCC +VD
AGC DET
IC1 AN6336S
TP1
R6 1800
C35 0.1
L8 56μ
R5 680K
C7 50V 2.2
C6 0.01
C5 6V47
R7 1500
R9 1500
L2 220μ
R13 10K
R11 1K
C8 8200P
R10 1500
Q3 2SB709
L1 47μ
C11 0.01
C12 6V47
L3 220μ
TP4
TP3
C31 1000P
C10 0.01
R26 220K
C25 0.068
R27 8200
R29 0
R28 15K
R30 47K
IC3 NJM2904M
D1 MA151K
C26 0.1
R31 1M
R32 10K
R33 2700
C27 0.01
IC3 NJM-2904M
P351 (TO MOTHER)
10 Y PLAY RF OUT P309-3
9 GND P309-4
8 YC CLOG OUT P402-8
7 YC DO PULSE OUT ——
6 YP HEAD SW IN P511-9
5 CP HEAD SW IN P511-10
4 C PLAY RF OUT P307-3
3 GND P307-4
2 GND P307-1
1 +5V IN P307-2
C13 0.01
Q4 2SC3356
R14 15K
C15 50V1
R15 1K
C14 0.01
Q5 2SC3356
R16 15K
R17 1K
C16 50V1
C21 180P
R21 470
TP2
R19 1800
C36 0.1
L9 56μ
IC2 AN6336S
R18 680K
C19 50V 2.2
C18 0.01
C17 6V47
R20 1500
R22 1500
L5 220μ
C20 8200P
R24 1K
R23 1500
Q6 2SB709
L4 47μ
C37 39P
C23 0.01
C24 6V47
L6 220μ
C22 0.01
R25 27
TPG1
C32 1000P
REF. NO. 3000 SERIES
2
3
4
5
6
7

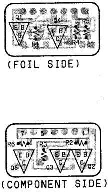
AUDIO P.C. BOARD UNIT (VEB0392A) (FOR AU-520/S)/(VEB0392C) (FOR AU-520) (VEB0392B) (FOR AU-505)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-520 S = USED FOR AU-520S ONLY
AU-520 = USED FOR AU-520 ONLY
AU-505 = USED FOR AU-505 ONLY

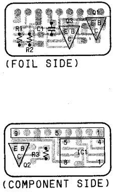
AUDIO SUB (8) P.C.B. (VEP84100A)
(PART OF VEP84009G)(FOR AU-520S ONLY)


(COMPONENT SIDE)
② (FOIL SIDE)
RY3
P1

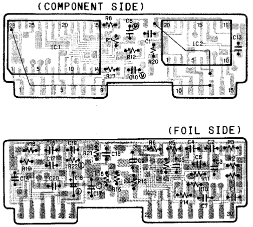
AUDIO SUB (4) P.C.B.
(VEP84015B)
(PART OF VEP84009G)
IC1, IC16 (FOR AU-520/S ONLY)


(FOIL SIDE)
(COMPONENT SIDE)

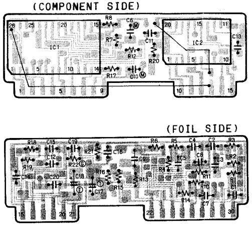
AUDIO SUB (5) P.C.B.
(VEP80218A)
(PART OF VEP84009G)
IC23, IC24 (FOR AU-520/S ONLY)


(FOIL SIDE)
(COMPONENT SIDE)

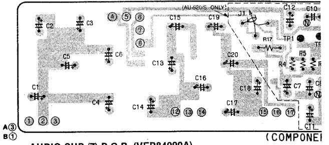
AUDIO SUB (2) P.C.B. (VEP84012C) (PART OF VEP0392A/B)
IC202


(COMPONENT SIDE)
(FOIL SIDE)
IC1
IC2

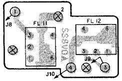
AUDIO SUB (1) P.C.B. (VEP04164C) (PART OF VEB0392A/B)
IC201


(COMPONENT SIDE)
(FOIL SIDE)
IC1
IC2

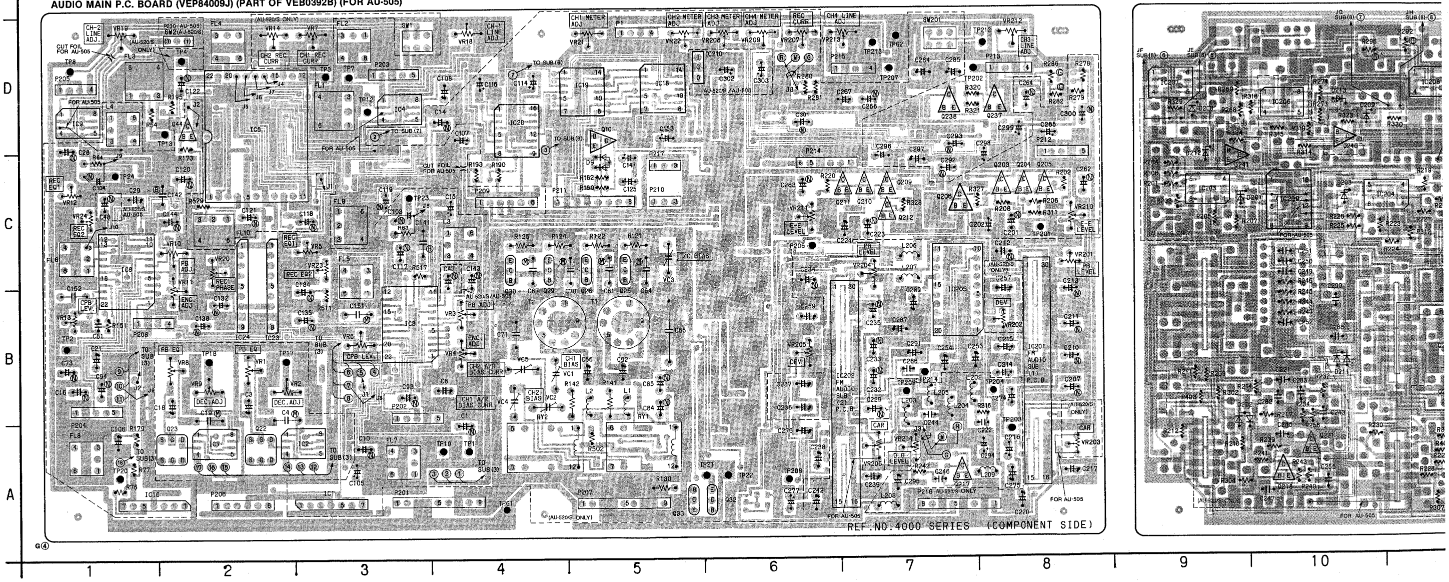
AUDIO SUB (3) P.C.B. (VEP80217A) (PART OF VEP84009G) (FOR
AUDIO SUB (3) P.C.B. (VEP80217C) (PART OF VEP84009K) (FOR
AUDIO SUB (3) P.C.B. (VEP80217B) (PART OF VEP84009J) (FOR


A③
B①
(COMPONE

AUDIO SUB (7) P.C.B. (VEP84090A)
(PART OF VEP84009G) (FOR AU-520/S ONLY)


J8
FL11
FL12
J9
J10

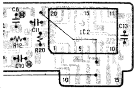
AUDIO MAIN P.C. BOARD (VEP84009G) (PART OF VEB0392A) (FOR AU-520S), (VEP84009K) (PART OF VEB0392C) (FOR AU-520)
AUDIO MAIN P.C. BOARD (VEP84009J) (PART OF VEB0392B) (FOR AU-505)


F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
G④
REF. NO. 4000 SERIES (COMPONENT SIDE)
IC201 FM AUDIO SUB (1) P.C.B.
IC202 FM AUDIO SUB (2) P.C.B.
T1
T2
RY1
RY2
CH1 METER ADJ
CH2 METER ADJ
CH3 METER ADJ
CH4 METER ADJ
REC CURR.
CH4 LINE ADJ
CH3 LINE ADJ
CH-1 LINE ADJ
CH-2 LINE ADJ
CH2 REC CURR
CH1 REC CURR
REC EQ1
REC EQ2
PB ADJ
REC PHASE
ENC. ADJ
CPB LEV.
PB EQ
DEC. ADJ
CPB LEV.
PB ADJ
ENC. ADJ
CH2 A/R BIAS CURR
CH1 A/R BIAS CURR
CH1 BIAS
CH2 BIAS
T/C BIAS
E-E LEVEL
PB LEVEL
DEV
CAR
D.O LEVEL
FOR AU-505
(AU-520/S ONLY)

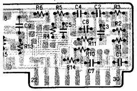
0/S = USED FOR AU-520S & AU-520
0 S = USED FOR AU-520S ONLY
0 = USED FOR AU-520 ONLY
5 = USED FOR AU-505 ONLY

04164C) (PART OF VEB0392A/B)

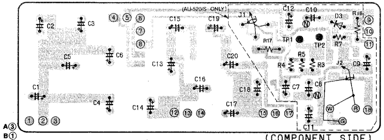
(DE)


IC2
C13
R20
C10 Ⓝ

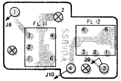
(FOIL SIDE)

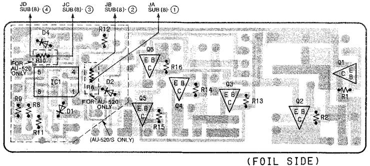


AUDIO SUB (3) P.C.B. (VEP80217A) (PART OF VEP84009G) (FOR AU-520S)
AUDIO SUB (3) P.C.B. (VEP80217C) (PART OF VEP84009K) (FOR AU-520)
AUDIO SUB (3) P.C.B. (VEP80217B) (PART OF VEP84009J) (FOR AU-505)

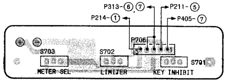

(AU-520/S ONLY)
J1
TP1
TP2
J2
A③
B①
(COMPONENT SIDE)

AUDIO SUB (7) P.C.B. (VEP84090A)
(PART OF VEP84009G) (FOR AU-520/S ONLY)

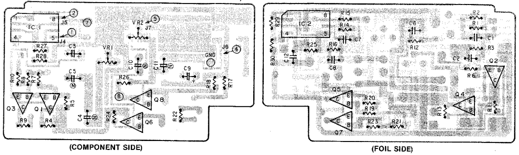

J8
FL11
FL12
J9
J10

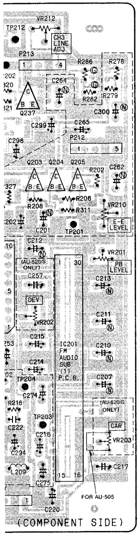

JD SUB(8)-④
JC SUB(8)-③
JB SUB(8)-②
JA SUB(8)-①
FOR AU-520 ONLY
(AU-520/S ONLY)
(FOIL SIDE)

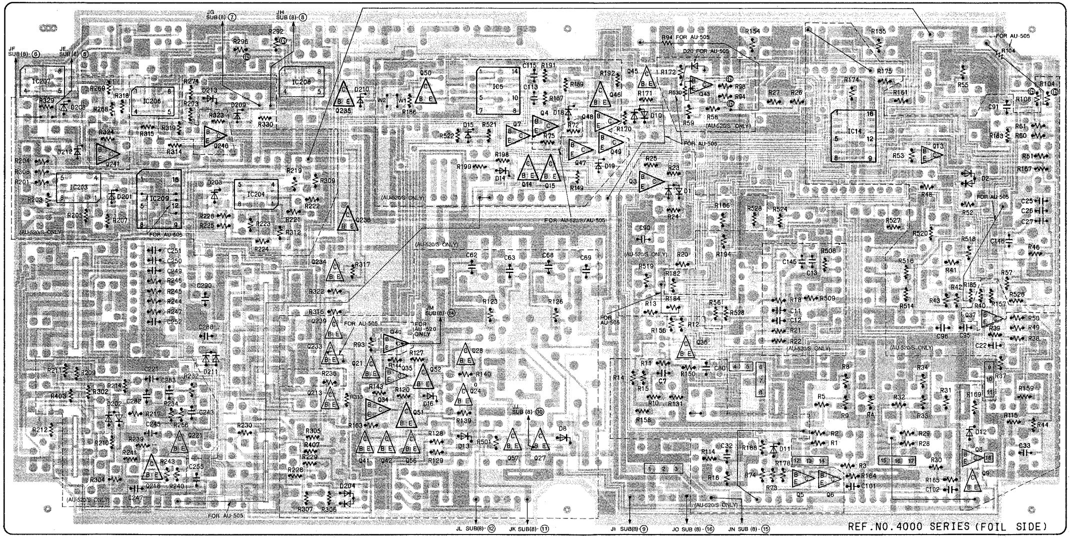
FRONT 3 P.C.B. (VEP80092A) (FOR AU-520/S ONLY)


P313-⑥
P214-①
P211-⑤
P405-⑦
P706
S703
METER SEL
S702
LIMITER
S701
KEY INHIBIT

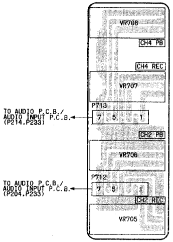
AUDIO SUB (6) P.C.B. (VEP84079A)
(PART OF VEP84009G) (FOR AU-520/S ONLY)


(COMPONENT SIDE)
(FOIL SIDE)

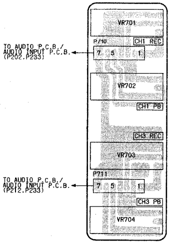

VR212
TP212
CH3 LINE ADJ
P213
P212
TP201
E-E LEVEL
VR201
PB LEVEL
DEV
VR202
IC201 FM AUDIO SUB (1) P.C.B.
TP204
TP203
(AU-520S ONLY)
CAR
VR203
FOR AU-505
(COMPONENT SIDE)


JG SUB(8)-⑦
JH SUB(8)-⑧
JF SUB(8)-⑥
JE SUB(8)-⑤
FOR AU-505
(AU-520/S ONLY)
FOR AU-520S/AU-505
JM SUB(8)-⑭
JJ SUB (8)-⑩
JL SUB(8)-⑫
JK SUB(8)-⑪
JI SUB(8)-⑨
JO SUB (8)-⑯
JN SUB (8)-⑮
REF.NO.4000 SERIES (FOIL SIDE)

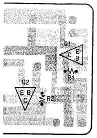
VR 2 P.C.B. (VEP80094B)
(FOR AU-520/S ONLY)


VR708
CH4 PB
CH4 REC
VR707
P713
TO AUDIO P.C.B./ AUDIO INPUT P.C.B. (P214.P233)
CH2 PB
VR706
P712
TO AUDIO P.C.B./ AUDIO INPUT P.C.B. (P204.P233)
CH2 REC
VR705

VR 1 P.C.B. (VEP80093A)
(FOR AU-520/S ONLY)

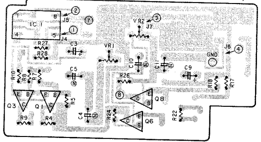

VR701
P710
CH1 REC
TO AUDIO P.C.B./ AUDIO INPUT P.C.B. (P202.P233)
VR702
CH1 PB
CH3 REC
VR703
P711
TO AUDIO P.C.B./ AUDIO INPUT P.C.B. (P212.P233)
CH3 PB
VR704

8 9 10 11 12 13 14 15 16 17

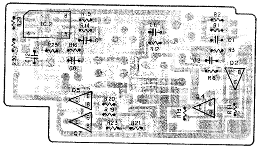

Q1
C
E
B
R1
Q2
E
B
C
R2

SIDE)

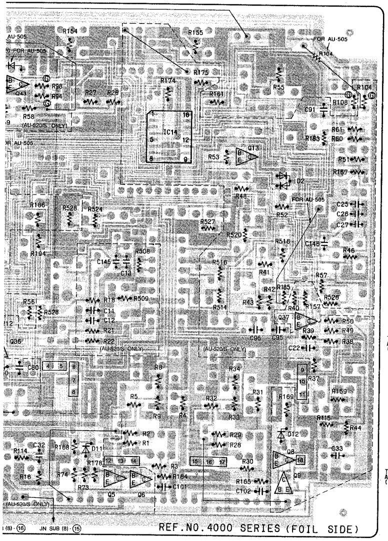
AUDIO SUB (6) P.C.B. (VEP84079A)
(PART OF VEP84009G) (FOR AU-520/S ONLY)


IC 1
VR2
J7
VR1
GND
J6
Q8
Q6
Q3
Q1
R27
R28
C3
C5
C10
C11
C9
R26
R24
R22
R9
R4
C4

(COMPONENT SIDE)

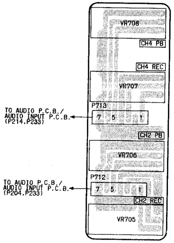

IC 2
R15
R14
R25
R16
C7
C8
C6
R12
R2
R1
C1
R3
C2
Q2
R6
Q5
Q4
R20
R19
R23
R21
Q7
R13
R29
R30

(FOIL SIDE)

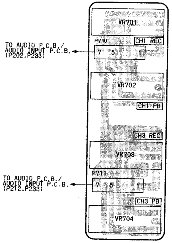

AU-505
FOR AU-505
R154
R155
FOR AU-505
R104
R174
R175
R55
R161
R108
C91
IC14
Q13
R53
R183
R60
R51
R167
D2
R48
FOR AU-505
C25
C26
C27
R166
R528
R524
R527
R52
R520
R518
C146
R46
C145
R508
C13
R516
R41
R57
R194
R185
R42
R526
R561
R18
R509
R526
R43
R514
R157
Q37
R50
R49
C11
C12
R21
R22
(AU-520/S ONLY)
C96
C95
R39
R38
C22
(AU-520/S ONLY)
C90
R8
R34
R37
R5
R32
R31
R169
R159
R9
R33
R415
R44
R2
R1
R29
R28
D12
R114
C32
R168
D11
R178
R3
R30
C33
Q8
R16
R74
R73
Q5
D6
R184
C101
R165
C102
Q9
(AU-520/S ONLY)
JN SUB (8) ⑮
REF.NO.4000 SERIES (FOIL SIDE)

14 15 16 17

VR 2 P.C.B. (VEP80094B)
(FOR AU-520/S ONLY)


VR708
CH4 PB
CH4 REC
VR707
TO AUDIO P.C.B./ AUDIO INPUT P.C.B. (P214,P233)
P713
7 5 1
CH2 PB
VR706
TO AUDIO P.C.B./ AUDIO INPUT P.C.B. (P204,P233)
P712
7 5 1
CH2 REC
VR705

VR 1 P.C.B. (VEP80093A)
(FOR AU-520/S ONLY)


VR701
P710
CH1 REC
TO AUDIO P.C.B./ AUDIO INPUT P.C.B. (P202,P233)
7 5 1
VR702
CH1 PB
CH3 REC
VR703
TO AUDIO P.C.B./ AUDIO INPUT P.C.B. (P212,P233)
P711
7 5 1
CH3 PB
VR704

AUDIO P.C.B.

Transistors

Q4003	C-13
Q4004	D-13
Q4005	A-14
Q4006	A-15
Q4007	D-12
Q4008	A-16
Q4009	A-16
Q4010	D-5
Q4013	D-15
Q4014	C-12
Q4015	C-13
Q4021	B-11
Q4022	A-2
Q4023	A-2
Q4024	B-12
Q4025	C-5
Q4026	C-5
Q4027	A-13
Q4028	B-12
Q4029	C-4
Q4030	C-4
Q4032	A-6
Q4033	A-5
Q4034	B-11
Q4035	B-12
Q4036	B-14
Q4037	B-16
Q4040	B-12
Q4041	A-11
Q4042	A-11
Q4043	D-14
Q4044	D-2
Q4045	D-13
Q4046	D-13
Q4047	C-13
Q4048	D-13
Q4049	D-13
Q4050	D-12
Q4051	B-12
Q4052	B-12
Q4056	A-12
Q4057	A-12
Q4203	C-8
Q4204	C-8
Q4205	C-8
Q4206	C-7
Q4209	C-7
Q4210	C-7
Q4211	C-7
Q4212	C-7
Q4213	B-11
Q4217	A-7
Q4218	A-10
Q4221	A-10
Q4233	B-11
Q4234	C-11
Q4235	D-11
Q4236	C-11
Q4237	D-7
Q4238	D-7
Q4239	B-11
Q4240	D-10
Q4241	C-9

Integrated Circuits

IC4001	A-3
IC4002	A-3
IC4003	B-3
IC4004	D-3
IC4005	D-12
IC4006	D-2
IC4007	A-2
IC4008	C-1
IC4009	D-1
IC4014	D-15
IC4016	A-1
IC4018	D-5
IC4019	D-5
IC4020	D-4
IC4023	B-2
IC4024	B-2
IC4201	B-8
IC4202	B-7
IC4203	C-9
IC4204	C-10
IC4205	B-7
IC4206	D-10
IC4207	D-9
IC4208	D-11
IC4209	C-10
IC4210	D-6

Test Points

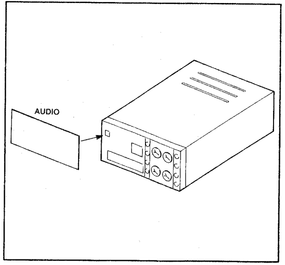
TP4001	A-4
TP4002	B-1
TP4003	D-3
TP4004	D-2
TP4007	D-3
TP4008	D-1
TP4012	D-3
TP4013	D-2
TP4017	B-2
TP4018	B-2
TP4019	A-4
TP4020	A-1
TP4021	A-6
TP4022	A-6
TP4023	C-3
TP4024	C-1
TP4201	C-8
TP4202	D-7
TP4203	A-8
TP4204	B-8
TP4206	C-6
TP4207	D-7
TP4208	A-6
TP4209	B-7
TP4212	D-8
TP4213	D-7
TP4214	B-7
TPG4001	A-4
TPG4002	D-7

Adjustments

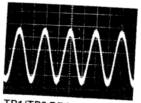
VC4001	B-4
VC4002	B-4
VC4003	C-5
VC4004	B-4
VC4005	B-4
VR4001	B-2
VR4002	B-2
VR4003	B-4
VR4004	B-4
VR4005	C-3
VR4006	B-3
VR4007	D-3
VR4008	B-2
VR4009	B-2
VR4010	C-2
VR4011	C-2
VR4012	C-1
VR4013	B-1
VR4014	D-2
VR4018	D-4
VR4019	D-1
VR4020	C-2
VR4021	D-5
VR4022	D-5
VR4023	C-3
VR4024	C-1
VR4201	C-8
VR4202	B-8
VR4203	A-8
VR4204	C-7
VR4205	B-6
VR4206	A-7
VR4207	A-6
VR4208	D-6
VR4209	D-6
VR4210	C-8
VR4211	C-6
VR4212	D-8
VR4213	D-7
VR4214	A-7

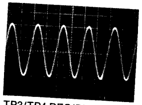
ADDRESS INFORMATION

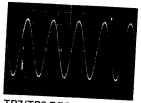
P.C. BOARD LOCATION

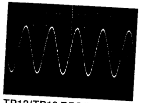


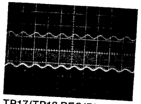
EAR AUDIO WAVEFORMS

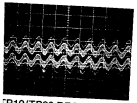

TP1/TP2 REC/PLAY
50mV/0.5msec. div.

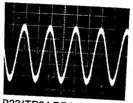

TP3/TP4 REC/PLAY
0.2V/0.5msec. div.


TP7/TP8 REC/PLAY
0.2V/0.5msec. div.

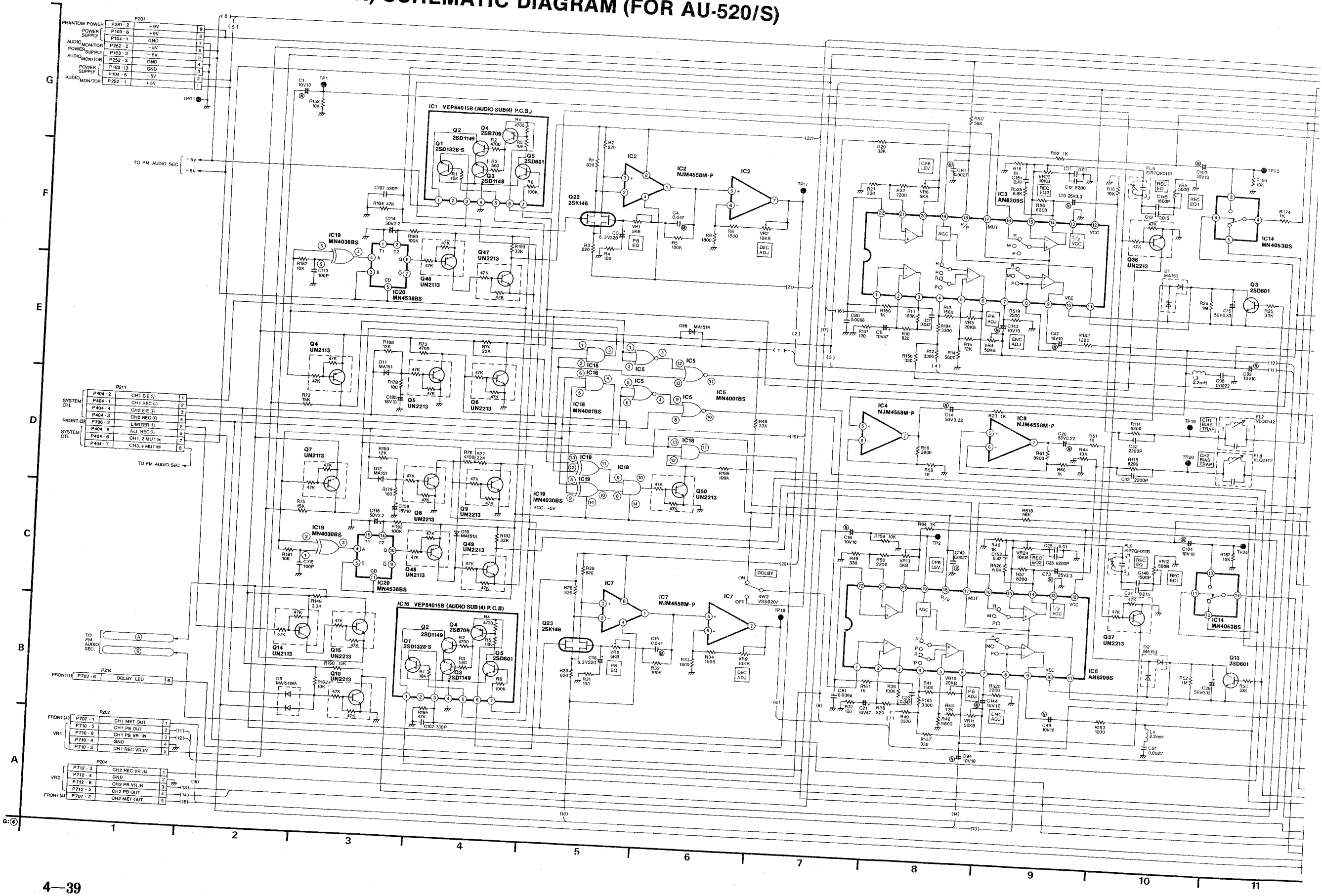

TP12/TP13 REC/PLAY
0.5V/0.5msec. div.


TP17/TP18 REC/PLAY
0.5V/1msec. div.

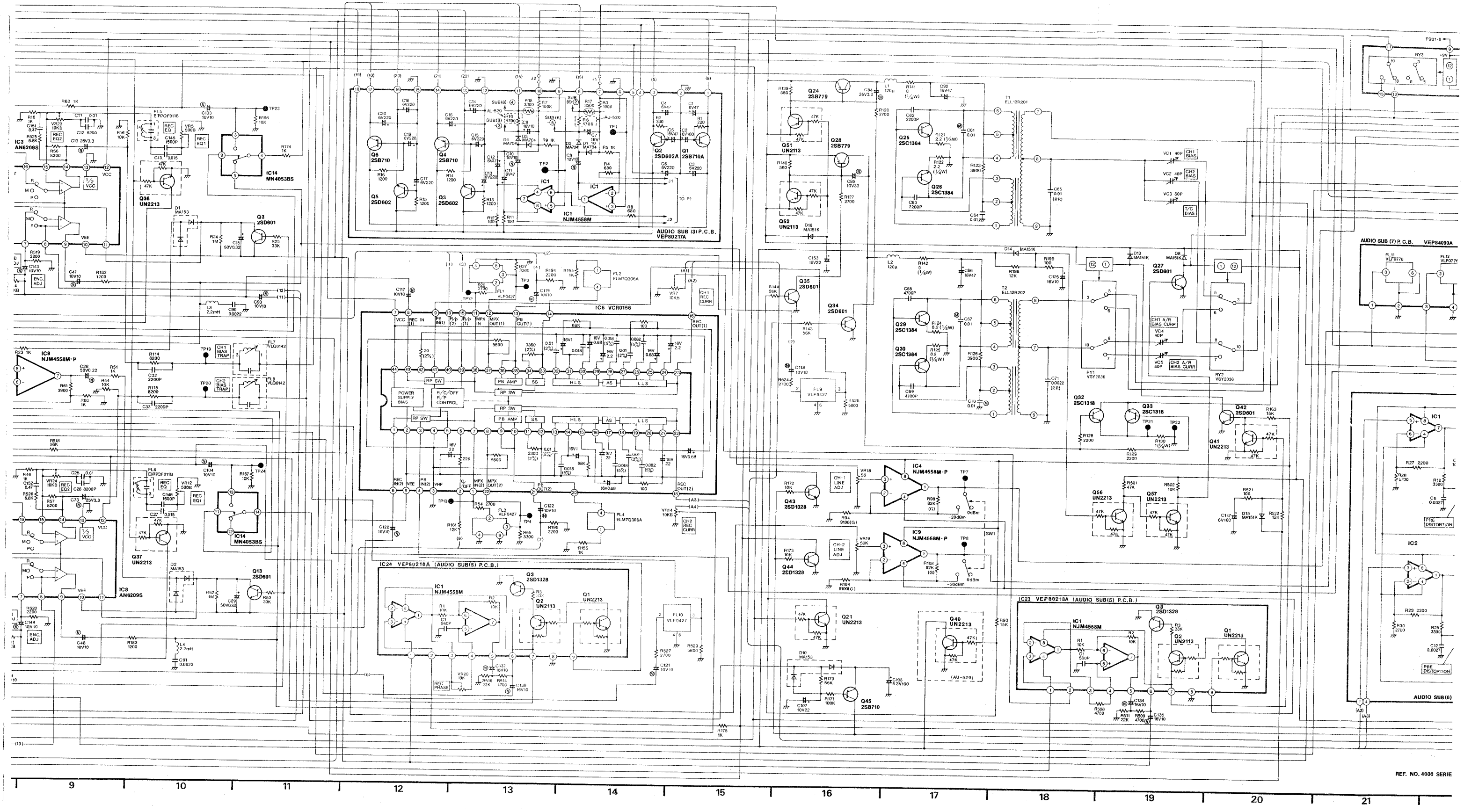

TP19/TP20 REC/PLAY
.5V/1msec. div.


P23/TP24 REC/PLAY
)mV/0.5msec. div.

AUDIO (LINEAR AUDIO SECTION) SCHEMATIC DIAGRAM (FOR AU-520/S)



PHANTOM POWER
POWER SUPPLY
AUDIO MONITOR
P201
+9V
GND
-5V
+5V
TO FM AUDIO SEC.
TPG1
TP1
IC1 VEP84015B (AUDIO SUB(4) P.C.B.)
Q1 2SD1328-S
Q2 2SD1149
Q3 2SD1149
Q4 2SB709
Q5 2SD601
IC2 NJM4558M-P
Q22 2SK146
PB EQ
DEC ADJ
TP17
IC19 MN4030BS
IC20 MN4538BS
Q46 UN2113
Q47 UN2213
IC3 AN6209S
AGC
MUT
CPB LEV
REC EQ
REC EQ1
REC EQ2
FL5 E(R7QF011B
TP23
IC14 MN4053BS
Q36 UN2213
Q3 2SD601
D1 MA153
Q4 UN2113
Q5 UN2213
Q6 UN2213
D11 MA151
D18 MA151K
IC5 MN4001BS
IC18 MN4081BS
P211
SYSTEM CTL
FRONT (3)
CH1 E-E
CH1 REC
CH2 E-E
CH2 REC
LIMITER
ALL REC
CH1, 2 MUT
CH3, 4 MUT
IC4 NJM4558M-P
IC9 NJM4558M-P
TP19
TP20
CH1 BIAS TRAP
CH2 BIAS TRAP
FL7 VLQ0142
FL8 VLQ0142
Q7 UN2113
Q8 UN2213
Q9 UN2213
D12 MA151
IC19 MN4030BS VCC: +5V
Q50 UN2213
Q48 UN2113
Q49 UN2213
D19 MA151K
ENC ADJ
TP2
TP24
DOLBY
ON
OFF
SW2 VSS0207
IC7 NJM4558M-P
Q23 2SK146
TP18
IC16 VEP84015B (AUDIO SUB(4) P.C.B)
Q14 UN2113
Q15 UN2213
Q10 UN2213
D9 MA151WA
IC8 AN6209S
Q37 UN2213
Q13 2SD601
D2 MA153
FL6 E(R7QF011B
TO FM AUDIO SEC.
P214
FRONT(1)
DOLBY LED
P202
FRONT(4)
VR1
CH1 MET OUT
CH1 PB OUT
CH1 PB VR IN
GND
CH1 REC VR IN
P204
VR2
CH2 REC VR IN
CH2 PB VR IN
CH2 PB OUT
CH2 MET OUT
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11


IC3 AN6209S
IC9 NJM4558M-P
IC8 AN6209S
IC14 MN4053BS
Q36 UN2213
Q37 UN2213
Q3 2SD601
Q13 2SD601
D1 MA153
D2 MA153
FL5 EIR7QF011B
FL6 EIR7QF011B
FL7 VLQ0142
FL8 VLQ0142
CH1 BIAS TRAP
CH2 BIAS TRAP
TP19
TP20
TP23
TP24
L3 2.2mH
L4 2.2mH
ENC. ADJ
REC EQ
REC EQ1
REC EQ2
1/2 VCC
VCC
VEE
Q6 2SB710
Q5 2SD602
Q4 2SB710
Q3 2SD602
Q2 2SD602A
Q1 2SB710A
IC1 NJM4558M
TP1
TP2
AUDIO SUB (3) P.C.B. VEP80217A
IC6 VCR0156
POWER SUPPLY BIAS
B/C/OFF R/P CONTROL
RP SW
PB AMP
SS
HLS
AS
LLS
FL1 VLF0427
FL2 ELM7Q306A
FL3 VLF0427
FL4 ELM7Q306A
FL9 VLF0427
FL10 VLF0427
TP3
TP4
TP12
TP13
CH1 REC CURR
CH2 REC CURR
VR7 10KB
VR14 10KB
IC24 VEP80218A (AUDIO SUB(5) P.C.B.)
IC1 NJM4558M
Q3 2SD1328
Q2 UN2113
Q1 UN2213
REC PHASE
Q24 2SB779
Q28 2SB779
Q51 UN2113
Q52 UN2113
Q35 2SD601
Q34 2SD601
Q25 2SC1384
Q26 2SC1384
Q29 2SC1384
Q30 2SC1384
T1 ELL12R201
T2 ELL12R202
VC1 40P CH1 BIAS
VC2 40P CH2 BIAS
VC3 60P T/C BIAS
VC4 40P CH1 A/R BIAS CURR
VC5 40P CH2 A/R BIAS CURR
RY1 VSY2036
RY2 VSY2036
RY3
Q27 2SD601
D13 MA151K
D14 MA151K
D8 MA151K
D16 MA151K
Q32 2SC1318
Q33 2SC1318
TP21
TP22
Q42 2SD601
Q41 UN2213
IC4 NJM4558M-P
IC9 NJM4558M-P
TP7
TP8
SW1
CH-1 LINE ADJ
CH-2 LINE ADJ
Q43 2SD1328
Q44 2SD1328
Q21 UN2213
D10 MA153
Q45 2SB710
Q40 UN2213 (AU-520)
Q56 UN2213
Q57 UN2213
D15 MA151K
IC23 VEP80218A (AUDIO SUB(5) P.C.B.)
AUDIO SUB (7) P.C.B. VEP84090A
FL11 VLF0776
FL12 VLF0776
P201-8
+9V
IC1
IC2
PRE DISTORTION
AUDIO SUB(6)
9
10
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14
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19
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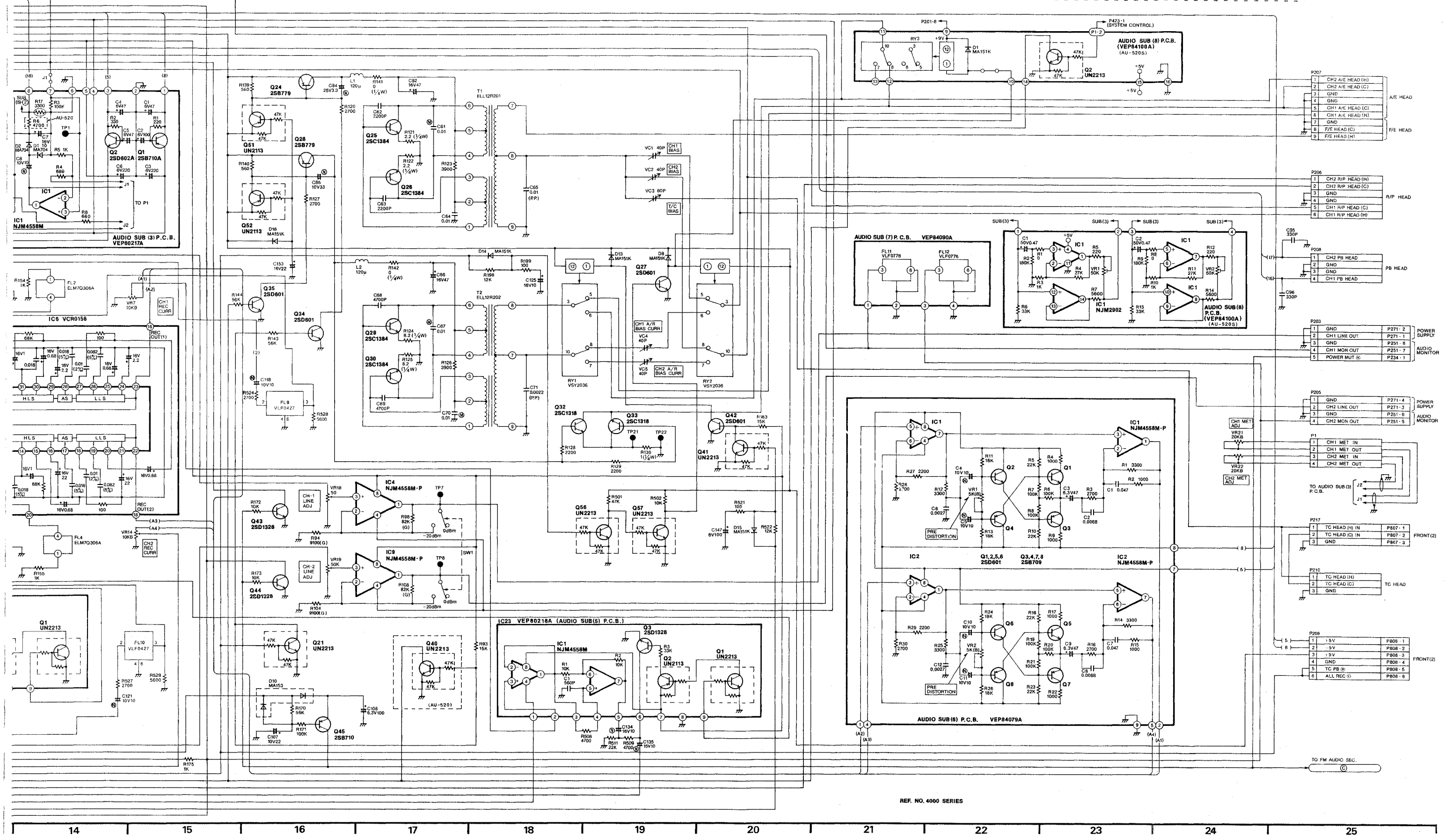
21

REF. NO. 4000 SERIE

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-520 S = USED FOR AU-520S ONLY
AU-520 = USED FOR AU-520 ONLY
AU-505 = USED FOR AU-505 ONLY


AUDIO SUB (3) P.C.B. VEP80217A
IC1 NJM4558M
Q1 2SB710A
Q2 2SD602A
TO P1
IC5 VCR0156
Q24 2SB779
Q28 2SB779
Q51 UN2113
Q52 UN2113
Q25 2SC1384
Q26 2SC1384
Q29 2SC1384
Q30 2SC1384
T1 ELL12R201
T2 ELL12R202
Q35 2SD601
Q34 2SD601
FL9 VLF0427
RY1 VSY2036
RY2 VSY2036
CH1 BIAS
CH2 BIAS
T/C BIAS
CH1 A/R BIAS CURR
CH2 A/R BIAS CURR
Q27 2SD601
Q32 2SC1318
Q33 2SC1318
Q42 2SD601
Q41 UN2213
Q56 UN2213
Q57 UN2213
IC4 NJM4558M-P
IC9 NJM4558M-P
Q43 2SD1328
Q44 2SD1328
CH-1 LINE ADJ
CH-2 LINE ADJ
TP7
TP8
0dBm
-20dBm
Q21 UN2213
Q40 UN2213
(AU-520)
Q45 2SB710
IC23 VEP80218A (AUDIO SUB(5) P.C.B.)
Q3 2SD1328
Q2 UN2113
Q1 UN2213
P201-8
P423-1 (SYSTEM CONTROL)
RY3
AUDIO SUB (8) P.C.B. (VEP84100A) (AU-520S)
Q2 UN2213
AUDIO SUB (7) P.C.B. VEP84090A
FL11 VLF0776
FL12 VLF0776
IC1 NJM2902
AUDIO SUB (8) P.C.B. (VEP84100A) (AU-520S)
P207
CH2 A/E HEAD (H)
CH2 A/E HEAD (C)
GND
CH1 A/E HEAD (C)
CH1 A/E HEAD (H)
F/E HEAD (C)
F/E HEAD (H)
A/E HEAD
F/E HEAD
P206
CH2 R/P HEAD (H)
CH2 R/P HEAD (C)
CH1 R/P HEAD (C)
CH1 R/P HEAD (H)
R/P HEAD
P208
CH2 PB HEAD
CH1 PB HEAD
PB HEAD
P203
CH1 LINE OUT
CH1 MON OUT
POWER MUT
POWER SUPPLY
AUDIO MONITOR
P205
CH2 LINE OUT
CH2 MON OUT
CH1 MET ADJ
CH2 MET ADJ
P1
CH1 MET IN
CH1 MET OUT
CH2 MET IN
CH2 MET OUT
TO AUDIO SUB (3) P.C.B.
P217
TC HEAD (H) IN
TC HEAD (C) IN
FRONT(2)
P210
TC HEAD (H)
TC HEAD (C)
TC HEAD
P209
+5V
-5V
+9V
TC PB
ALL REC
IC1 NJM4558M-P
IC2 NJM4558M-P
Q1,2,5,6 2SD601
Q3,4,7,8 2SB709
PRE DISTORTION
AUDIO SUB (6) P.C.B. VEP84079A
TO FM AUDIO SEC.
REF. NO. 4000 SERIES
14
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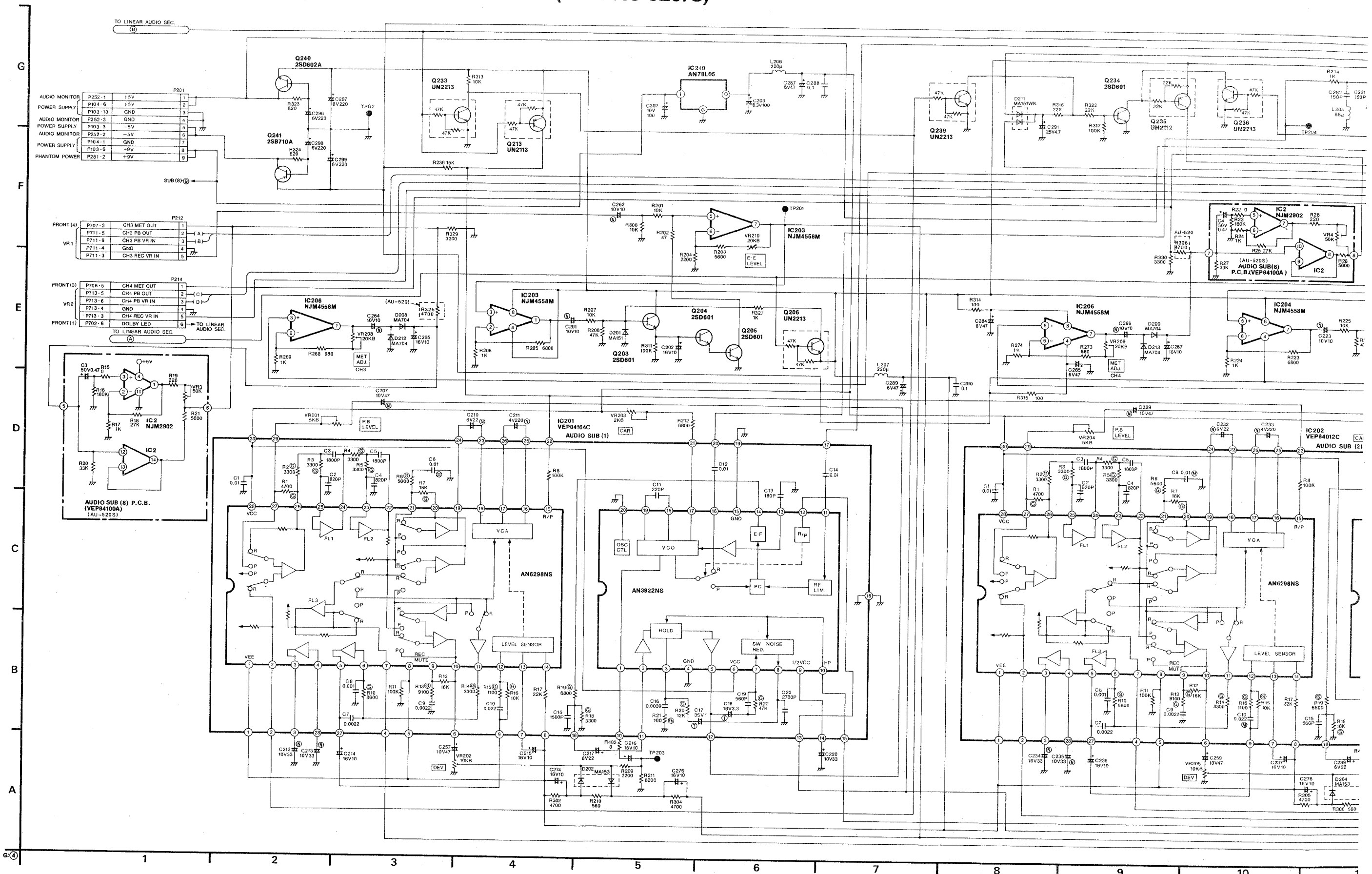
REVERSE SIDE

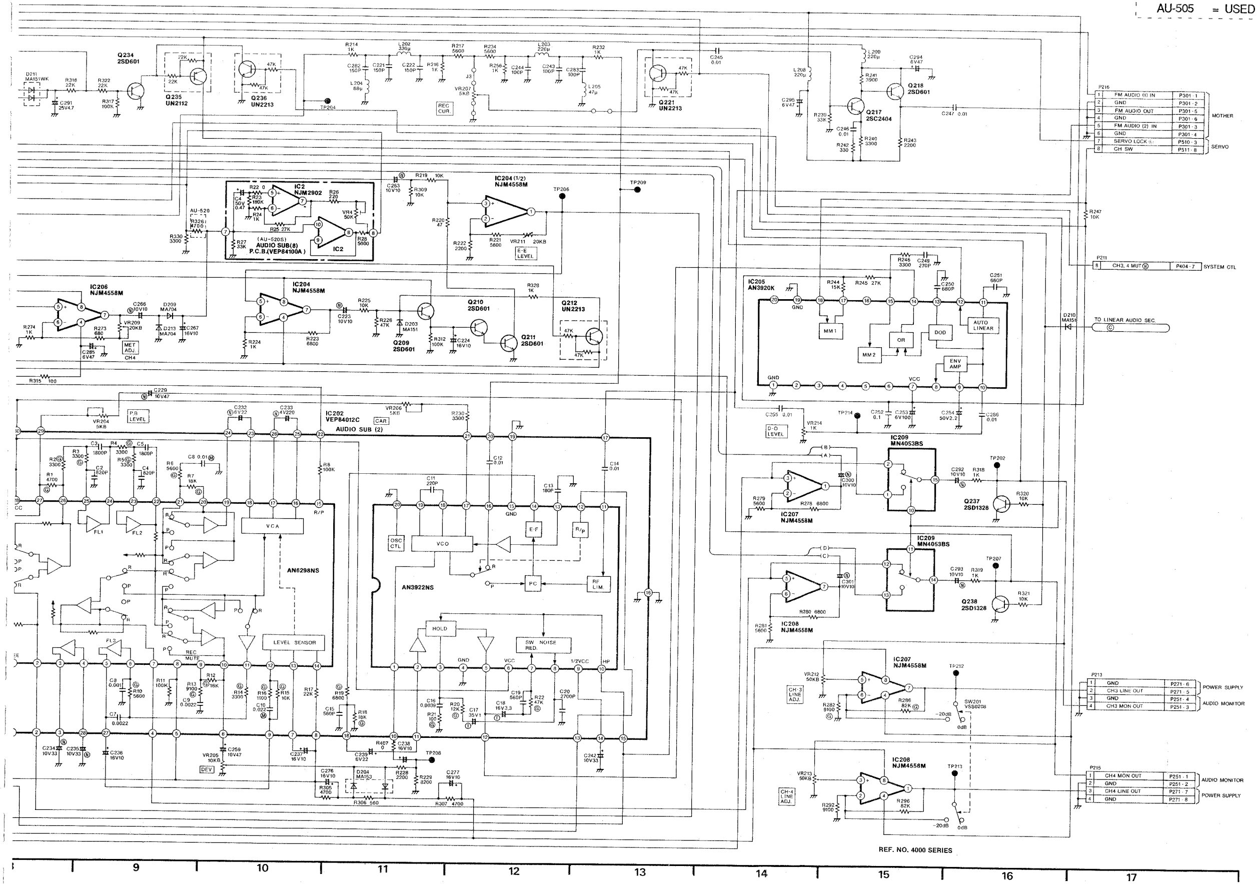
FM AUDIO SCHEMATIC DIAGRAM

AUDIO (FM AUDIO SECTION) SCHEMATIC DIAGRAM (FOR AU-520/S)



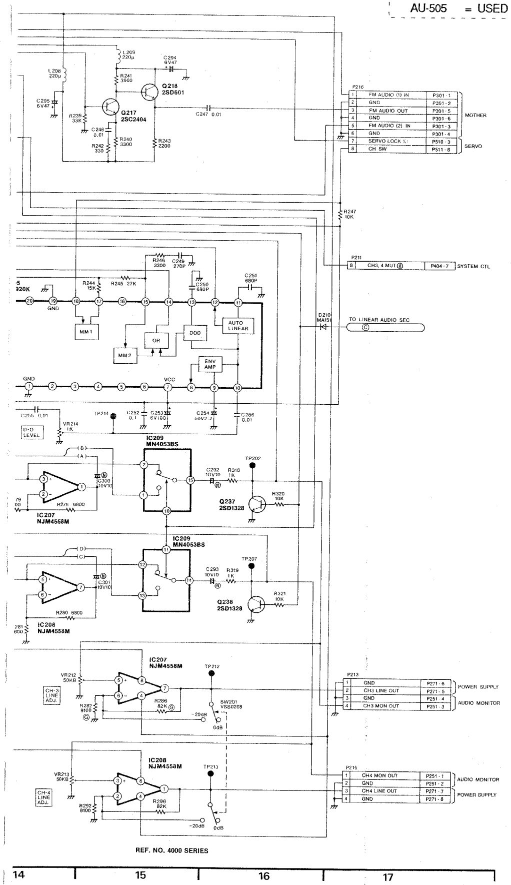
TO LINEAR AUDIO SEC.
Q240 2SD602A
Q241 2SB710A
Q233 UN2213
Q213 UN2113
IC210 AN78L05
Q234 2SD601
Q235 UN2112
Q236 UN2213
Q239 UN2213
P201
AUDIO MONITOR
POWER SUPPLY
PHANTOM POWER
TPG2
SUB (6)
P212
FRONT (4)
VR1
CH3 MET OUT
CH3 PB OUT
CH3 PB VR IN
GND
CH3 REC VR IN
P214
FRONT (3)
VR2
FRONT (1)
CH4 MET OUT
CH4 PB OUT
CH4 PB VR IN
CH4 REC VR IN
DOLBY LED
TO LINEAR AUDIO SEC.
IC206 NJM4558M
IC203 NJM4558M
IC204 NJM4558M
IC2 NJM2902
Q204 2SD601
Q205 2SD601
Q203 2SD601
Q206 UN2213
TP201
TP203
TP204
E-E LEVEL
MET ADJ.
CH3
CH4
AUDIO SUB (8) P.C.B. (VEP84100A) (AU-520S)
AUDIO SUB(8) P.C.B.(VEP84100A)
IC201 VEP04164C AUDIO SUB (1)
IC202 VEP84012C AUDIO SUB (2)
P.B LEVEL
CAR
DEV
AN6298NS
AN3922NS
VCA
VCO
OSC CTL
E-F
R/P
PC
RF LIM
HOLD
SW NOISE RED.
LEVEL SENSOR
FL1
FL2
FL3
REC MUTE
VCC
VEE
GND
1/2VCC
HP
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-520 S = USED FOR AU-520S ONLY
AU-520 = USED FOR AU-520 ONLY
AU-505 = USED FOR AU-505 ONLY

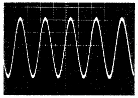

Q234 2SD601
Q235 UN2112
Q236 UN2213
Q221 UN2213
Q217 2SC2404
Q218 2SD601
TP204
REC CUR.
VR207 5KB
J3
D211 MA151WK
IC2 NJM2902
AU-520
(AU-520S)
AUDIO SUB(B) P.C.B.(VEP84100A)
IC204 (1/2) NJM4558M
TP206
TP209
E-E LEVEL
IC206 NJM4558M
MET ADJ.
CH4
IC204 NJM4558M
Q209 2SD601
Q210 2SD601
Q211 2SD601
Q212 UN2213
IC205 AN3920K
MM1
MM2
OR
DOD
AUTO LINEAR
ENV AMP
GND
VCC
D210 MA151
TO LINEAR AUDIO SEC.
P.B LEVEL
IC202 VEP84012C
AUDIO SUB (2)
CAR
VR206 5KB
AN6298NS
VCA
LEVEL SENSOR
REC MUTE
FL1
FL2
FL3
AN3922NS
OSC CTL
VCO
E-F
R/P
PC
RF LIM
HOLD
SW NOISE RED.
1/2VCC
HP
DEV
TP208
D204 MA153
D-O LEVEL
TP214
IC209 MN4053BS
IC207 NJM4558M
IC208 NJM4558M
TP202
TP207
Q237 2SD1328
Q238 2SD1328
CH-3 LINE ADJ.
CH-4 LINE ADJ.
TP212
TP213
SW201 VSS0208
−20dB
0dB
P216
1 FM AUDIO (1) IN P301-1
2 GND P301-2
3 FM AUDIO OUT P301-5
4 GND P301-6
5 FM AUDIO (2) IN P301-3
6 GND P301-4
7 SERVO LOCK (L) P510-3
8 CH SW P511-8
MOTHER
SERVO
P211
8 CH3, 4 MUT(H) P404-7
SYSTEM CTL
P213
1 GND P271-6
2 CH3 LINE OUT P271-5
3 GND P251-4
4 CH3 MON OUT P251-3
POWER SUPPLY
AUDIO MONITOR
P215
1 CH4 MON OUT P251-1
2 GND P251-2
3 CH4 LINE OUT P271-7
4 GND P271-8
AUDIO MONITOR
POWER SUPPLY
9
10
11
12
13
14
15
16
17

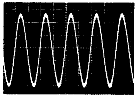
REF. NO. 4000 SERIES

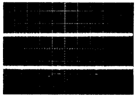
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-520 S = USED FOR AU-520S ONLY
AU-520 = USED FOR AU-520 ONLY
AU-505 = USED FOR AU-505 ONLY

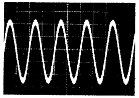

L209 220μ
C294 6V47
L208 220μ
R241 3900
Q218 2SD601
C295 6V47
R239 33K
Q217 2SC2404
C247 0.01
C246 0.01
R240 3300
R243 2200
R242 330
P216
FM AUDIO (1) IN P301-1
GND P301-2
FM AUDIO OUT P301-5
GND P301-6
FM AUDIO (2) IN P301-3
GND P301-4
SERVO LOCK P510-3
CH SW P511-8
MOTHER
SERVO
R247 10K
P211
CH3, 4 MUT P404-7
SYSTEM CTL
R246 3300
C249 270P
R244 15K
R245 27K
C250 680P
C251 680P
920K
GND
MM1
MM2
OR
DOD
AUTO LINEAR
ENV AMP
D210 MA151
TO LINEAR AUDIO SEC
GND
VCC
C255 0.01
TP214
C252 0.1
C253 6V100
C254 50V2.2
C286 0.01
D-O LEVEL
VR214 1K
IC209 MN4053BS
TP202
C292 10V10
R318 1K
C300 10V10
Q237 2SD1328
R320 10K
R278 6800
IC207 NJM4558M
IC209 MN4053BS
TP207
C293 10V10
R319 1K
C301 10V10
Q238 2SD1328
R321 10K
R280 6800
IC208 NJM4558M
IC207 NJM4558M
TP212
VR212 50KB
CH-3 LINE ADJ.
R282 9100
R286 82K
SW201 VSS0208
-20dB
0dB
P213
GND P271-6
CH3 LINE OUT P271-5
GND P251-4
CH3 MON OUT P251-3
POWER SUPPLY
AUDIO MONITOR
IC208 NJM4558M
TP213
VR213 50KB
CH-4 LINE ADJ.
R292 9100
R296 82K
-20dB
0dB
P215
CH4 MON OUT P251-1
GND P251-2
CH4 LINE OUT P271-7
GND P271-8
AUDIO MONITOR
POWER SUPPLY
REF. NO. 4000 SERIES
14
15
16
17

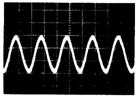
FM AUDIO WAVEFORMS

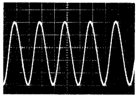

TP201/TP202 REC/PLAY
50mV/0.5msec. div.


TP203 REC/PLAY
50mV/0.5msec. div.

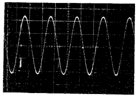

TP204/TP209 REC/PLAY
0.1V/10μsec. div.

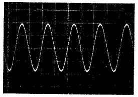

TP206/TP207 REC/PLAY
50mV/0.5msec. div.

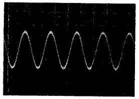

TP208 REC/PLAY
50mV/0.5msec. div.

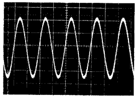

TP212/TP213
0.2V/0.5msec. div.

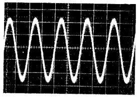
AUDIO WAVEFORMS

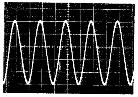

TP7/TP8 PLAY
0.2V/0.5msec. div.

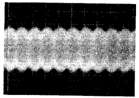

TP12/TP13 PLAY
0.5V/0.5msec. div.


TP17/TP18
50mV/0.5msec. div.

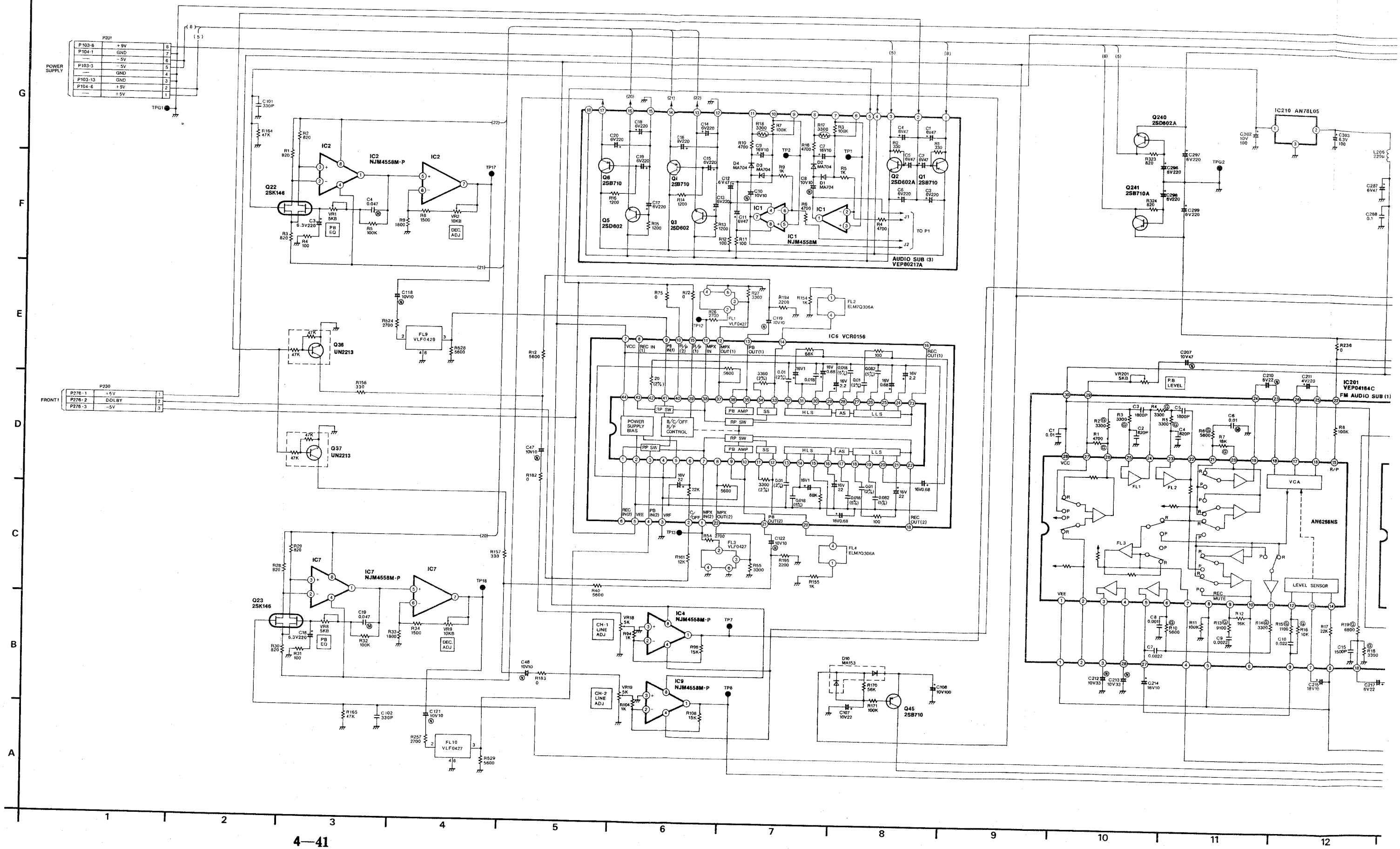

TP202 PLAY
50mV/0.5msec. div.


TP207 PLAY
50mV/0.5msec. div.

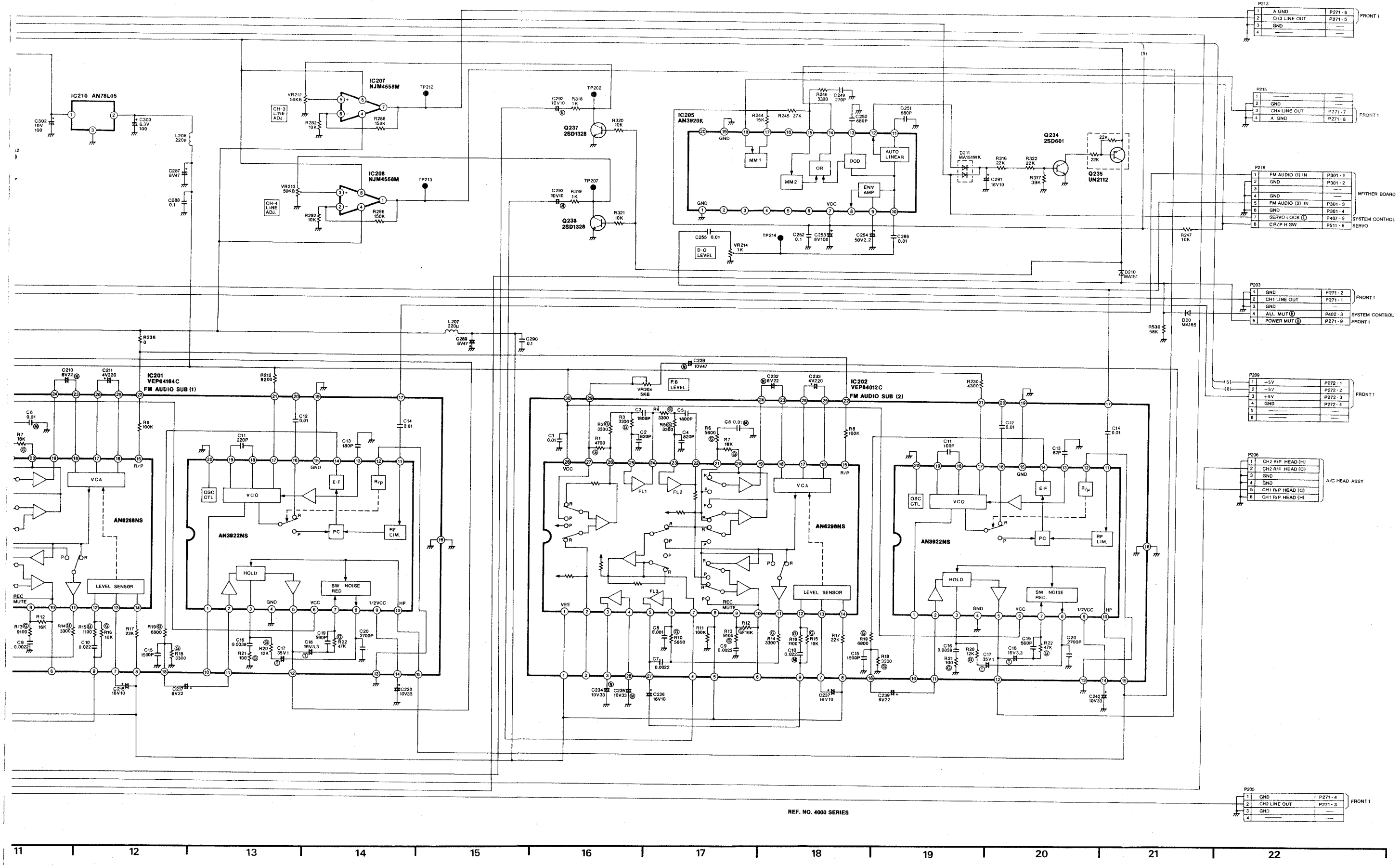

TP212/TP213
0.2V/0.5msec. div.


TP214
20mV/1msec. div.

AUDIO SCHEMATIC DIAGRAM (FOR AU-505)



POWER SUPPLY
P201
P103-6 +9V
P104-1 GND
-5V
P103-3 -5V
GND
P103-13 GND
P104-6 +5V
+5V
TPG1
FRONT1
P230
P276-1 +5V
P276-2 DOLBY
P276-3 -5V
IC2
IC2 NJM4558M-P
Q22 2SK146
VR1 5KB
PB EQ
VR2 10KB
DEC. ADJ
TP17
Q36 UN2213
Q37 UN2213
FL9 VLF0429
IC7
IC7 NJM4558M-P
Q23 2SK146
VR8 5KB
VR9 10KB
TP18
FL10 VLF0427
Q6 2SB710
Q5 2SD602
Q4 2SB710
Q3 2SD602
IC1
IC1 NJM4558M
TP2
TP1
Q2 2SD602A
Q1 2SB710
TO P1
J1
J2
AUDIO SUB (3) VEP80217A
IC6 VCR0156
FL1 VLF0427
FL2 ELM7Q306A
TP12
POWER SUPPLY BIAS
B/C/OFF R/P CONTROL
RP SW
PB AMP
SS
HLS
AS
LLS
TP13
FL3 VLF0427
FL4 ELM7Q306A
CH-1 LINE ADJ
VR18 5K
IC4 NJM4558M-P
TP7
CH-2 LINE ADJ
VR19 5K
IC9 NJM4558M-P
TP8
D10 MA153
Q45 2SB710
Q240 2SD602A
Q241 2SB710A
TPG2
IC210 AN78L05
IC201 VEP04184C
FM AUDIO SUB (1)
VR201 5KB
PB LEVEL
VCC
FL1
FL2
FL3
VCA
AN6298NS
LEVEL SENSOR
REC MUTE
VEE
R/P
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12


IC210 AN78L05
C302 10V 100
C303 6.3V 100
L206 220μ
C287 6V47
C288 0.1
IC207 NJM4558M
VR212 50KB
CH-3 LINE ADJ.
R282 10K
R286 150K
TP212
IC208 NJM4558M
VR213 50KB
CH-4 LINE ADJ.
R292 10K
R298 150K
TP213
C292 10V10
R318 1K
TP202
Q237 2SD1328
R320 10K
C293 10V10
R319 1K
TP207
Q238 2SD1328
R321 10K
IC205 AN3920K
GND
VCC
R244 15K
R245 27K
R246 3300
C249 270P
C250 680P
C251 680P
MM 1
MM 2
OR
DOD
AUTO LINEAR
ENV AMP
C255 0.01
VR214 1K
D-O LEVEL
TP214
C252 0.1
C253 6V100
C254 50V2.2
C286 0.01
D211 MA151WK
C291 16V10
R316 22K
R322 22K
R317 39K
Q234 2SD601
Q235 UN2112
22K
D210 MA151
R247 10K
R530 56K
D20 MA165
(5)
(8)
P213
1 A GND P271-6
2 CH3 LINE OUT P271-5
3 GND —
4 — —
FRONT 1
P215
1 — —
2 GND —
3 CH4 LINE OUT P271-7
4 A GND P271-8
FRONT 1
P216
1 FM AUDIO (1) IN P301-1
2 GND P301-2
3 —
4 GND —
5 FM AUDIO (2) IN P301-3
6 GND P301-4
7 SERVO LOCK Ⓛ P407-5
8 CR/P H SW P511-8
MOTHER BOARD
SYSTEM CONTROL
SERVO
P203
1 GND P271-2
2 CH1 LINE OUT P271-1
3 GND —
4 ALL MUT Ⓗ P402-3
5 POWER MUT Ⓗ P271-9
FRONT 1
SYSTEM CONTROL
FRONT 1
P209
1 +5V P272-1
2 −5V P272-2
3 +9V P272-3
4 GND P272-4
5 — —
6 — —
FRONT 1
P206
1 CH2 R/P HEAD (H)
2 CH2 R/P HEAD (C)
3 GND
4 GND
5 CH1 R/P HEAD (C)
6 CH1 R/P HEAD (H)
A/C HEAD ASSY
L207 220μ
C289 6V47
C290 0.1
R236 0
IC201 VEP04164C
FM AUDIO SUB (1)
C210 6V22
C211 4V220
C8 0.01
R7 18K
R8 100K
R212 8200
C12 0.01
C11 220P
C13 180P
C14 0.01
VCA
AN6298NS
LEVEL SENSOR
REC MUTE
R/P
OSC CTL
VCO
E-F
PC
RF LIM.
AN3922NS
HOLD
SW NOISE RED.
GND
VCC
1/2VCC
HP
R12 16K
R13 9100
R14 3300
R15 1100
R16 10K
C9 0.0022
C10 0.022
R17 22K
R19 6800
C15 1500P
R18 3300
C16 0.0039
R21 100
R20 12K
C17 35V1
C18 16V3.3
C19 560P
R22 47K
C20 2700P
C215 16V10
C217 6V22
C220 10V33
IC202 VEP84012C
FM AUDIO SUB (2)
C229 10V47
VR204 5KB
P.B LEVEL
C232 6V22
C233 4V220
R230 4300
C1 0.01
R1 4700
R2 3300
R3 3300
C3 1800P
R4 3300
R5 3300
C5 1800P
C2 820P
C4 820P
R6 5600
FL1
FL2
FL3
VEE
C8 0.001
R10 5600
C7 0.0022
R11 100K
C234 10V33
C235 10V33
C236 16V10
C237 16V10
C239 6V22
C242 10V33
11
12
13
14
15
16
17
18
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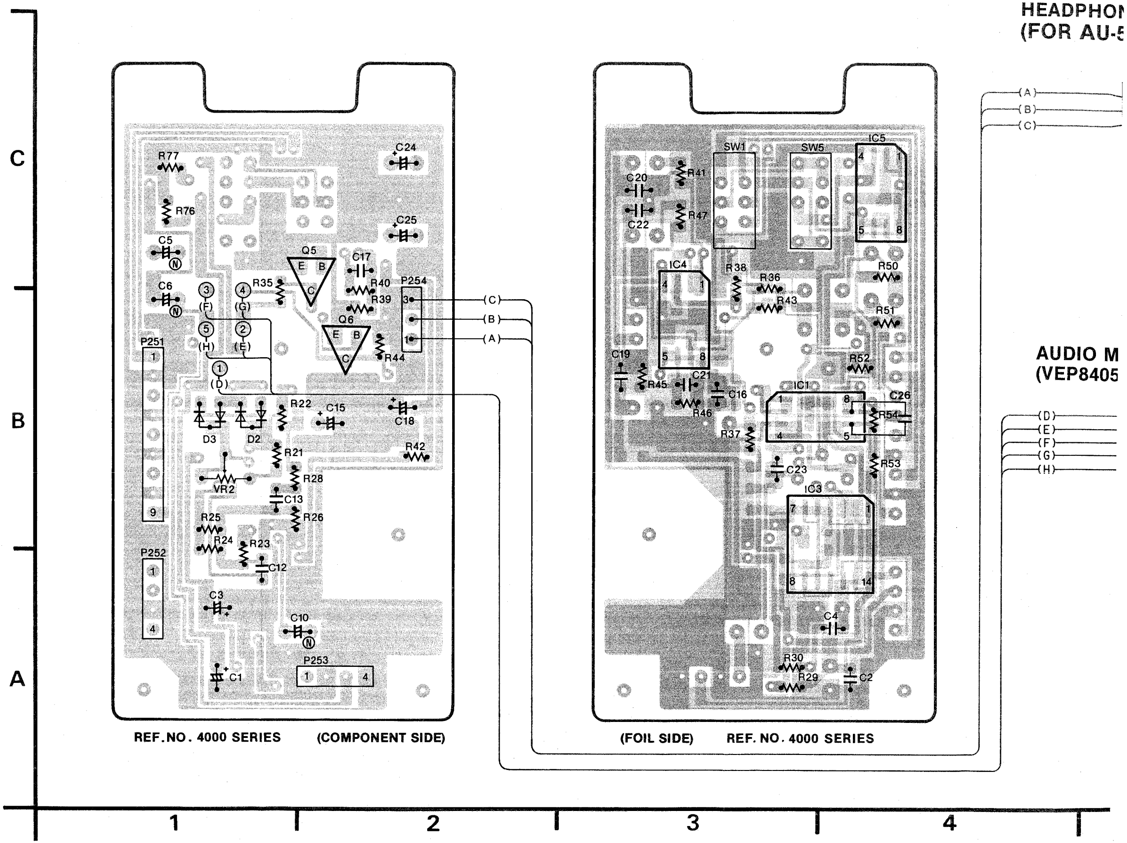
21
22

REF. NO. 4000 SERIES

AUDIO MONITOR P.C. BOARD (VEP84055B) (FOR AU-520/S ONLY)


C
B
A
1
2
3
4
R77
R76
C5
C6
C24
C25
Q5
E
B
C
C17
R35
R40
R39
P254
3
1
Q6
R44
3
(F)
4
(G)
5
(H)
2
(E)
1
(D)
P251
1
9
D3
D2
R22
C15
C18
R42
R21
R28
VR2
C13
R26
R25
R24
R23
C12
P252
1
4
C3
C10
P253
1
4
C1
(C)
(B)
(A)
SW1
SW5
IC5
4
1
5
8
C20
R41
C22
R47
IC4
R38
R36
R43
R50
R51
C19
R45
C21
C16
R46
IC1
1
8
4
5
C26
R54
R52
R37
C23
R53
IC3
7
1
8
14
C4
R30
R29
C2
(D)
(E)
(F)
(G)
(H)
N

REF.NO. 4000 SERIES **(COMPONENT SIDE)**

(FOIL SIDE) **REF. NO. 4000 SERIES**

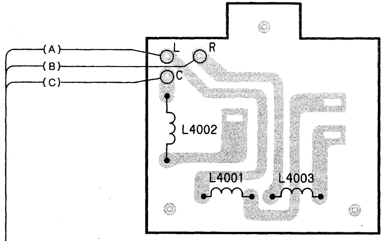
HEADPHON
(FOR AU-5

AUDIO M
(VEP8405

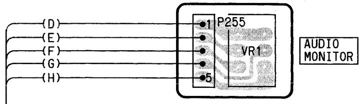
REVERSE SIDE
AUDIO
SCHEMATIC DIAGRAM

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

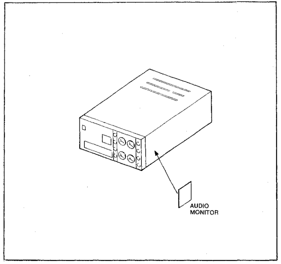
HEADPHONE JACK P.C.B. (VEP80388A)
(FOR AU-520/S)


(A)
(B)
(C)
L
R
C
L4002
L4001
L4003

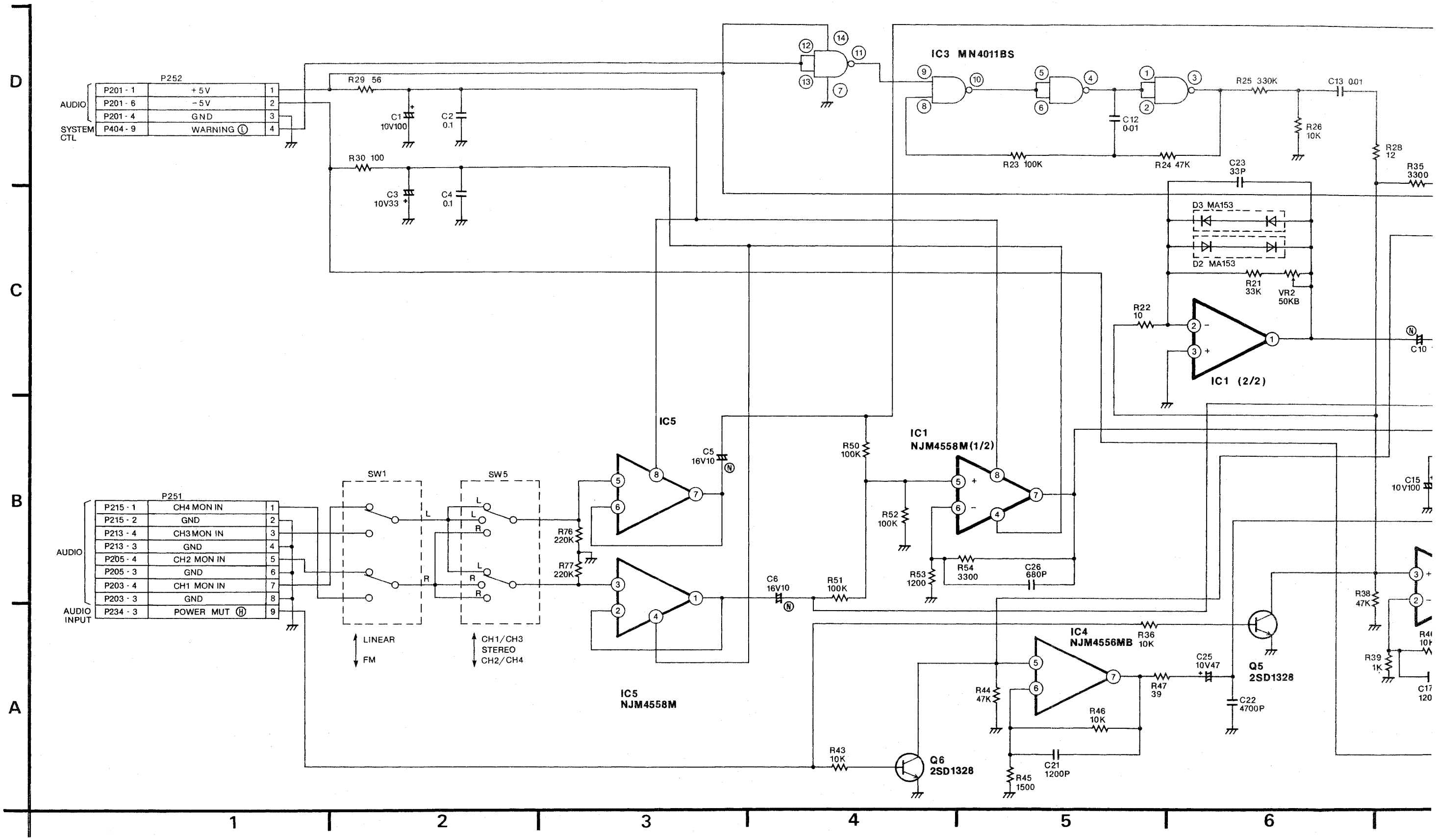
AUDIO MONITOR SUB (1) P.C.B.
(VEP84056B) (PART OF VEP84055B)


(D)
(E)
(F)
(G)
(H)
1
5
P255
VR1
AUDIO
MONITOR

P.C. BOARD LOCATION

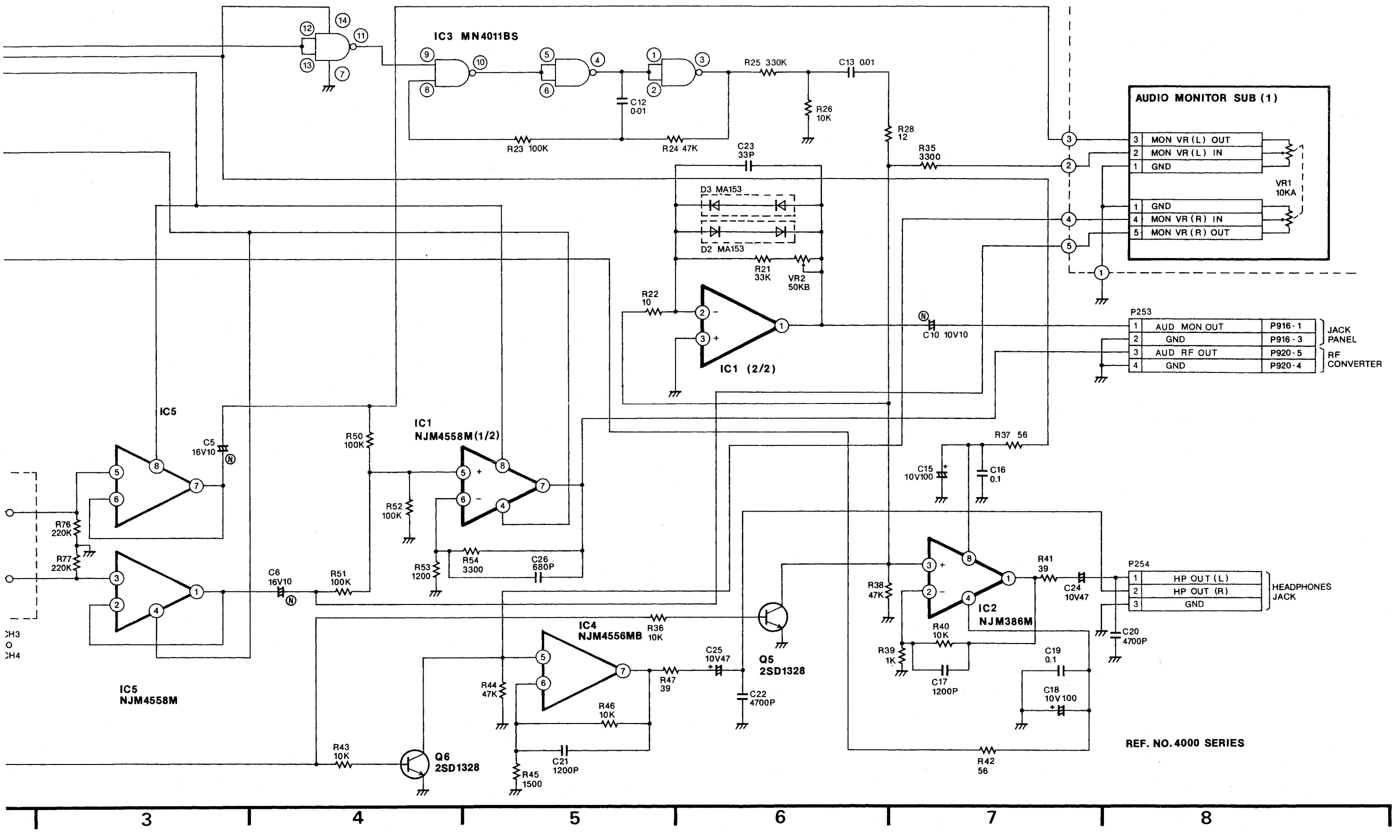

AUDIO
MONITOR

AUDIO MONITOR SCHEMATIC DIAGRAM (FOR AU-520/S ONLY)


D
C
B
A
1
2
3
4
5
6
P252
AUDIO
P201 - 1 +5V 1
P201 - 6 −5V 2
P201 - 4 GND 3
SYSTEM CTL
P404 - 9 WARNING Ⓛ 4
R29 56
C1 10V100
C2 0.1
R30 100
C3 10V33
C4 0.1
IC3 MN4011BS
R25 330K
C13 0.01
R26 10K
R28 12
R35 3300
C12 0.01
R23 100K
R24 47K
C23 33P
D3 MA153
D2 MA153
R21 33K
VR2 50KB
R22 10
IC1 (2/2)
C10
IC5
C5 16V10
Ⓝ
IC1 NJM4558M(1/2)
R50 100K
R52 100K
R53 1200
R54 3300
C26 680P
C15 10V100
P251
P215 - 1 CH4 MON IN 1
P215 - 2 GND 2
P213 - 4 CH3 MON IN 3
P213 - 3 GND 4
P205 - 4 CH2 MON IN 5
P205 - 3 GND 6
P203 - 4 CH1 MON IN 7
P203 - 3 GND 8
AUDIO INPUT
P234 - 3 POWER MUT Ⓗ 9
SW1
SW5
L
R
LINEAR
FM
CH1/CH3
STEREO
CH2/CH4
R76 220K
R77 220K
C6 16V10
R51 100K
IC5 NJM4558M
IC4 NJM4556MB
R36 10K
Q5 2SD1328
R38 47K
R39 1K
C25 10V47
R47 39
C22 4700P
R44 47K
R46 10K
C21 1200P
R45 1500
R43 10K
Q6 2SD1328

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

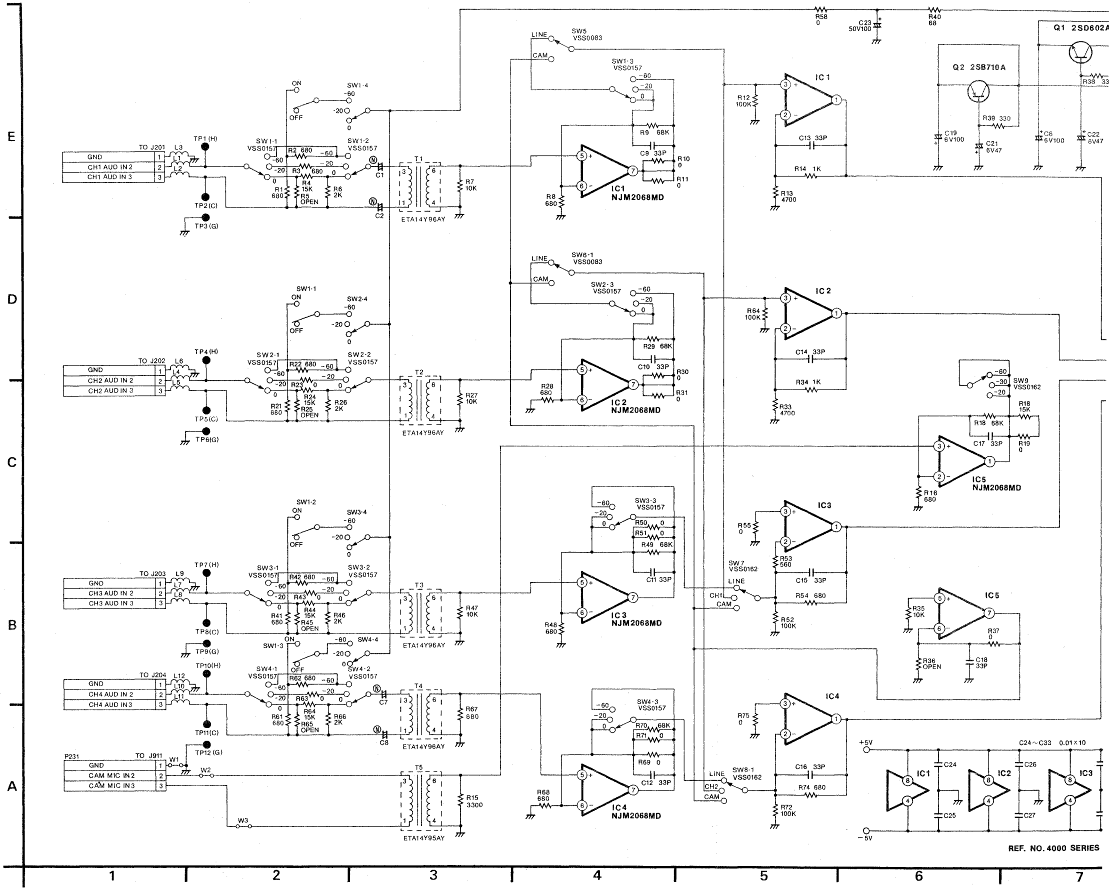
J-520/S ONLY)


IC3 MN4011BS
R25 330K
C13 0.01
R26 10K
C12 0.01
R23 100K
R24 47K
R28 12
R35 3300
C23 33P
D3 MA153
D2 MA153
R21 33K
VR2 50KB
R22 10
IC1 (2/2)
C10 10V10
AUDIO MONITOR SUB (1)
3 MON VR (L) OUT
2 MON VR (L) IN
1 GND
1 GND
4 MON VR (R) IN
5 MON VR (R) OUT
VR1 10KA
P253
1 AUD MON OUT P916-1
2 GND P916-3
3 AUD RF OUT P920-5
4 GND P920-4
JACK PANEL
RF CONVERTER
IC5
C5 16V10
R50 100K
IC1 NJM4558M (1/2)
R52 100K
R53 1200
R54 3300
C26 680P
R76 220K
R77 220K
CH3
O
CH4
C6 16V10
R51 100K
IC5 NJM4558M
R37 56
C15 10V100
C16 0.1
R38 47K
R41 39
C24 10V47
P254
1 HP OUT (L)
2 HP OUT (R)
3 GND
HEADPHONES JACK
IC2 NJM386M
R39 1K
R40 10K
C17 1200P
C19 0.1
C18 10V100
C20 4700P
IC4 NJM4556MB
R36 10K
Q5 2SD1328
C25 10V47
R47 39
C22 4700P
R44 47K
R46 10K
C21 1200P
R45 1500
R43 10K
Q6 2SD1328
R42 56
REF. NO. 4000 SERIES
3
4
5
6
7
8

REVERSE SIDE

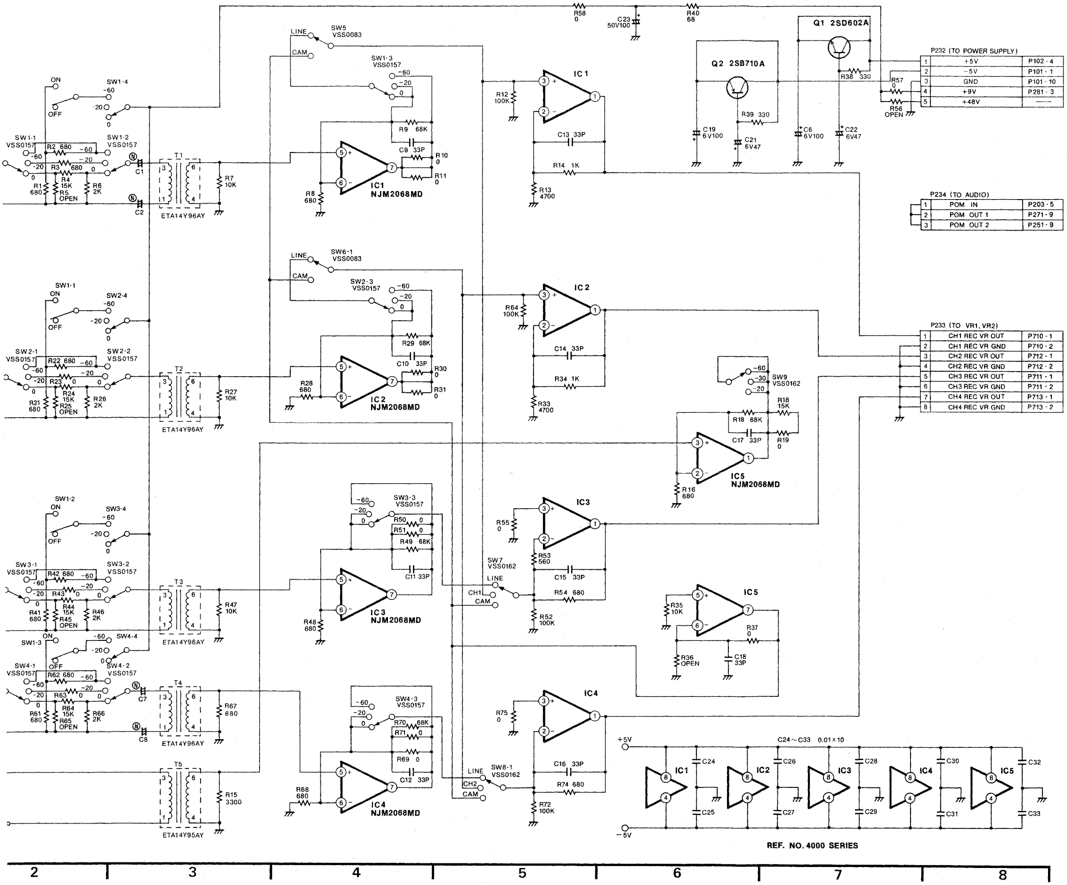
AUDIO INPUT
SCHEMATIC DIAGRAM

AUDIO INPUT SCHEMATIC DIAGRAM (FOR AU-520/S ONLY)


E
D
C
B
A
1
2
3
4
5
6
7
TO J201
GND
CH1 AUD IN 2
CH1 AUD IN 3
L1
L2
L3
TP1 (H)
TP2 (C)
TP3 (G)
SW1-1 VSS0157
SW1-2 VSS0157
SW1-4
ON
OFF
-60
-20
0
R2 680
R3 680
R1 680
R4 15K
R5 OPEN
R6 2K
C1
C2
T1
ETA14Y96AY
R7 10K
SW5 VSS0083
LINE
CAM
SW1-3 VSS0157
R9 68K
C9 33P
R10 0
R11 0
R8 680
IC1 NJM2068MD
R58 0
C23 50V100
R40 68
Q1 2SD602A
Q2 2SB710A
R12 100K
IC1
C13 33P
R14 1K
R13 4700
R39 330
R38 33
C19 6V100
C21 6V47
C6 6V100
C22 6V47
TO J202
CH2 AUD IN 2
CH2 AUD IN 3
L4
L5
L6
TP4 (H)
TP5 (C)
TP6 (G)
SW2-1 VSS0157
SW2-2 VSS0157
SW2-4
R22 680
R23 0
R21 680
R24 15K
R25 OPEN
R26 2K
T2
R27 10K
SW6-1 VSS0083
SW2-3 VSS0157
R29 68K
C10 33P
R30 0
R31 0
R28 680
IC2 NJM2068MD
R64 100K
IC2
C14 33P
R34 1K
R33 4700
SW9 VSS0162
-30
R18 68K
R18 15K
C17 33P
R19 0
R16 680
IC5 NJM2068MD
TO J203
CH3 AUD IN 2
CH3 AUD IN 3
L7
L8
L9
TP7 (H)
TP8 (C)
TP9 (G)
SW3-1 VSS0157
SW3-2 VSS0157
SW3-4
R42 680
R43 0
R41 680
R44 15K
R45 OPEN
R46 2K
T3
R47 10K
SW3-3 VSS0157
R50 0
R51 0
R49 68K
C11 33P
R48 680
IC3 NJM2068MD
R55 0
IC3
R53 560
C15 33P
R54 680
R52 100K
SW7 VSS0162
CH1
IC5
R35 10K
R36 OPEN
R37 0
C18 33P
SW1-3
SW4-4
TO J204
CH4 AUD IN 2
CH4 AUD IN 3
L10
L11
L12
TP10 (H)
TP11 (C)
TP12 (G)
SW4-1 VSS0157
SW4-2 VSS0157
R62 680
R63 0
R61 680
R64 15K
R65 OPEN
R66 2K
C7
C8
T4
R67 680
SW4-3 VSS0157
R70 68K
R71 0
R69 0
C12 33P
R68 680
IC4 NJM2068MD
R75 0
IC4
C16 33P
R74 680
R72 100K
SW8-1 VSS0162
CH2
P231
TO J911
CAM MIC IN 2
CAM MIC IN 3
W1
W2
W3
T5
ETA14Y95AY
R15 3300
+5V
-5V
C24~C33 0.01×10
C24
C25
C26
C27
REF. NO. 4000 SERIES

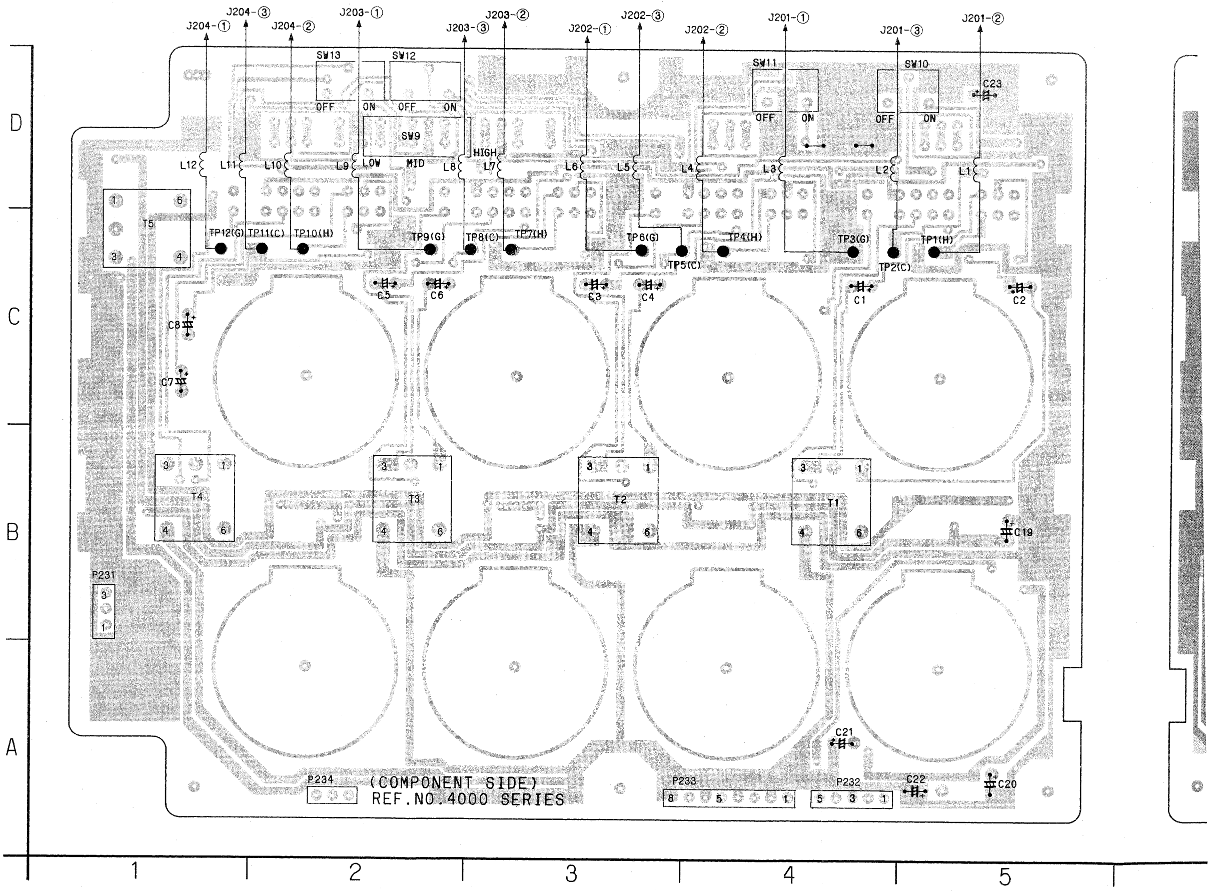
ATIC DIAGRAM (FOR AU-520/S ONLY)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

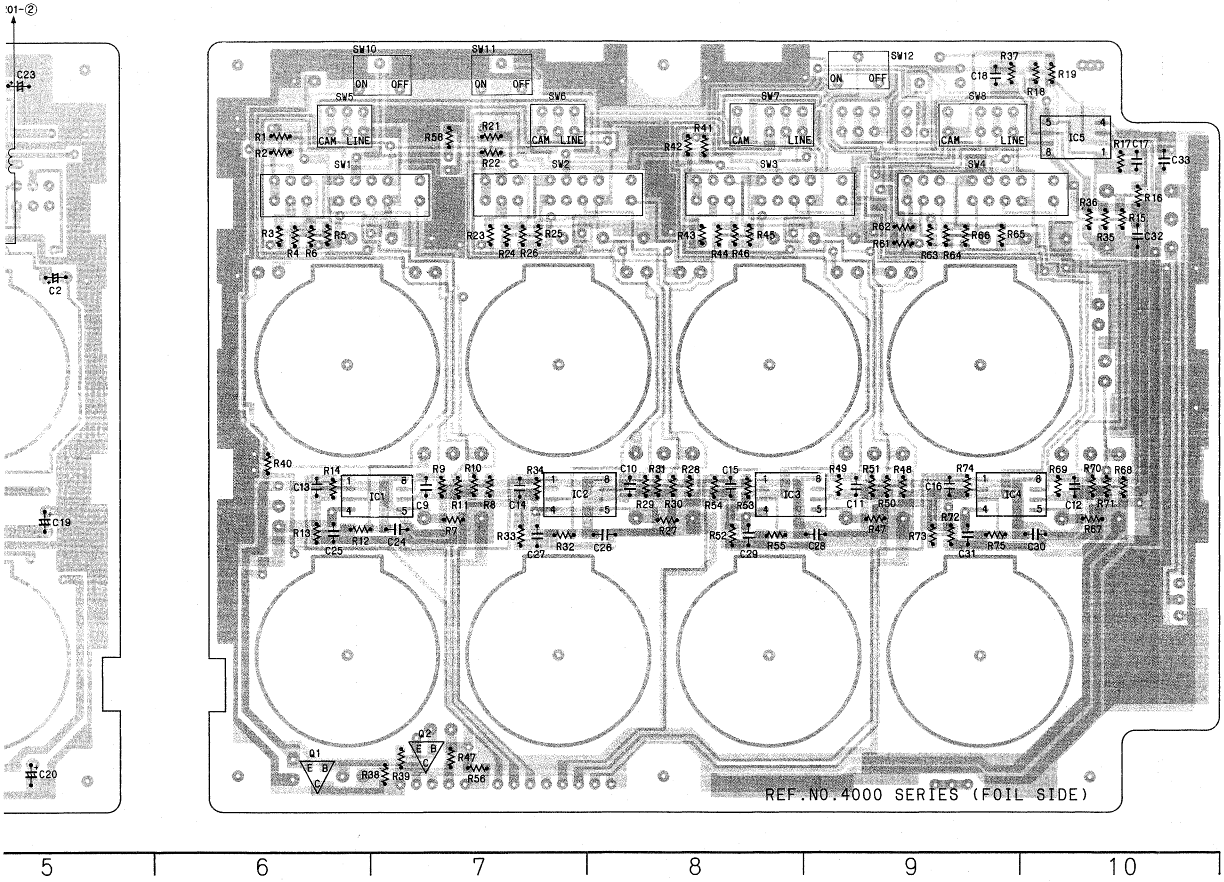


SW1-1 VSS0157
SW1-2 VSS0157
SW1-4
SW1-3 VSS0157
SW2-1 VSS0157
SW2-2 VSS0157
SW2-3 VSS0157
SW2-4
SW3-1 VSS0157
SW3-2 VSS0157
SW3-3 VSS0157
SW3-4
SW4-1 VSS0157
SW4-2 VSS0157
SW4-3 VSS0157
SW4-4
SW5 VSS0083
SW6-1 VSS0083
SW7 VSS0162
SW8-1 VSS0162
SW9 VSS0162
ON
OFF
LINE
CAM
CH1
CH2
-60
-20
-30
0
T1 ETA14Y96AY
T2 ETA14Y96AY
T3 ETA14Y96AY
T4 ETA14Y96AY
T5 ETA14Y95AY
IC1 NJM2068MD
IC2 NJM2068MD
IC3 NJM2068MD
IC4 NJM2068MD
IC5 NJM2068MD
Q1 2SD602A
Q2 2SB710A
R58 0
C23 50V100
R40 68
R38 330
R39 330
R57 0
R56 OPEN
C19 6V100
C21 6V47
C6 6V100
C22 6V47
R12 100K
C13 33P
R14 1K
R13 4700
R9 68K
C9 33P
R10 0
R11 0
R8 680
R7 10K
R1 680
R2 680
R3 680
R4 15K
R5 OPEN
R6 2K
C1
C2
R64 100K
C14 33P
R34 1K
R33 4700
R29 68K
C10 33P
R30 0
R31 0
R28 680
R27 10K
R21 680
R22 680
R23 0
R24 15K
R25 OPEN
R26 2K
R18 68K
R18 15K
C17 33P
R19 0
R16 680
R55 0
R53 560
C15 33P
R54 680
R52 100K
R50 0
R51 0
R49 68K
C11 33P
R48 680
R47 10K
R41 680
R42 680
R43 0
R44 15K
R45 OPEN
R46 2K
R35 10K
R36 OPEN
R37 0
C18 33P
R75 0
C16 33P
R74 680
R72 100K
R70 68K
R71 0
R69 0
C12 33P
R68 680
R67 680
R61 680
R62 680
R63 0
R64 15K
R65 OPEN
R66 2K
C7
C8
R15 3300
+5V
-5V
C24~C33 0.01×10
C24
C25
C26
C27
C28
C29
C30
C31
C32
C33
REF. NO. 4000 SERIES
P232 (TO POWER SUPPLY)
1 +5V P102-4
2 -5V P101-1
3 GND P101-10
4 +9V P281-3
5 +48V —
P234 (TO AUDIO)
1 POM IN P203-5
2 POM OUT 1 P271-9
3 POM OUT 2 P251-9
P233 (TO VR1, VR2)
1 CH1 REC VR OUT P710-1
2 CH1 REC VR GND P710-2
3 CH2 REC VR OUT P712-1
4 CH2 REC VR GND P712-2
5 CH3 REC VR OUT P711-1
6 CH3 REC VR GND P711-2
7 CH4 REC VR OUT P713-1
8 CH4 REC VR GND P713-2
2
3
4
5
6
7
8

AUDIO INPUT P.C. BOARD (VEP84086A) (FOR AU-520/S ONLY)

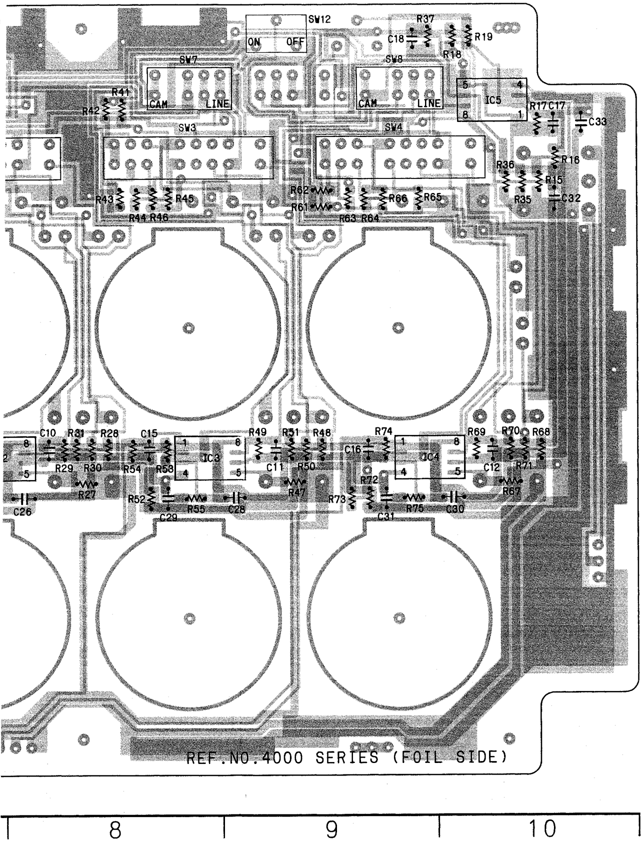

J204-①
J204-③
J204-②
J203-①
J203-③
J203-②
J202-①
J202-③
J202-②
J201-①
J201-③
J201-②
SW13
SW12
OFF
ON
OFF
ON
SW9
LOW
MID
HIGH
SW11
OFF
ON
SW10
OFF
ON
C23
L12
L11
L10
L9
L8
L7
L6
L5
L4
L3
L2
L1
T5
TP12(G)
TP11(C)
TP10(H)
TP9(G)
TP8(C)
TP7(H)
TP6(G)
TP5(C)
TP4(H)
TP3(G)
TP2(C)
TP1(H)
C5
C6
C3
C4
C1
C2
C8
C7
T4
T3
T2
T1
C19
P231
C21
P234
(COMPONENT SIDE)
REF.NO.4000 SERIES
P233
P232
C22
C20
D
C
B
A
1
2
3
4
5

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


01-②
C23
C2
C19
C20
SW10
ON OFF
SW11
ON OFF
SW12
ON OFF
SW5
CAM LINE
SW6
CAM LINE
SW7
CAM LINE
SW8
CAM LINE
SW1
SW2
SW3
SW4
R1
R2
R58
R21
R22
R41
R42
R37
R19
R18
C18
IC5
5 4 8 1
R17 C17
C33
R16
R36
R15
R35
C32
R3 R4 R5 R6
R23 R24 R25 R26
R43 R44 R45 R46
R62 R61 R63 R64 R66 R65
R40
R14 C13 IC1 C9 R9 R10 R11 R8 R7
R13 C25 R12 C24
R34 C14 IC2 C10 R31 R28 R29 R30 R27
R33 C27 R32 C26
C15 R54 R53 IC3 R49 R51 R48 C11 R50 R47
R52 C29 R55 C28
R74 C16 IC4 R69 R70 R68 C12 R71 R72 R67
R73 C31 R75 C30
1 8 4 5
Q1
E B C
Q2
E B C
R38 R39
R47
R56
REF.NO.4000 SERIES (FOIL SIDE)
5
6
7
8
9
10

AUDIO INPUT P.C.B.

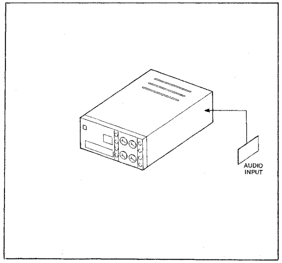
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


SW12
ON
OFF
R37
C18
R19
R18
SW7
CAM
LINE
SW8
CAM
LINE
IC5
R41
R42
R17
C17
C33
SW3
SW4
R16
R36
R15
R35
C32
R43
R44
R46
R45
R62
R61
R63
R64
R66
R65
C10
R31
R28
C15
R49
R51
R48
R74
R69
R70
R68
R29
R30
R54
R53
IC3
C11
R50
C16
IC4
C12
R71
R27
R47
R72
R67
C26
R52
R55
C28
R73
R75
C30
C29
C31
REF.NO.4000 SERIES (FOIL SIDE)
8
9
10

AUDIO INPUT P.C.B.	
Transistors	
Q4001	A-6
Q4002	A-7
Integrated Circuits	
IC4001	B-7
IC4002	B-7
IC4003	B-8
IC4004	B-9
IC4005	D-10
Test Points	
TP4001	C-5
TP4002	C-4
TP4003	C-4
TP4004	C-4
TP4005	C-3
TP4006	C-3
TP4007	C-3
TP4008	C-3
TP4009	C-2
TP4010	C-2
TP4011	C-2
TP4012	C-1

ADDRESS INFORMATION

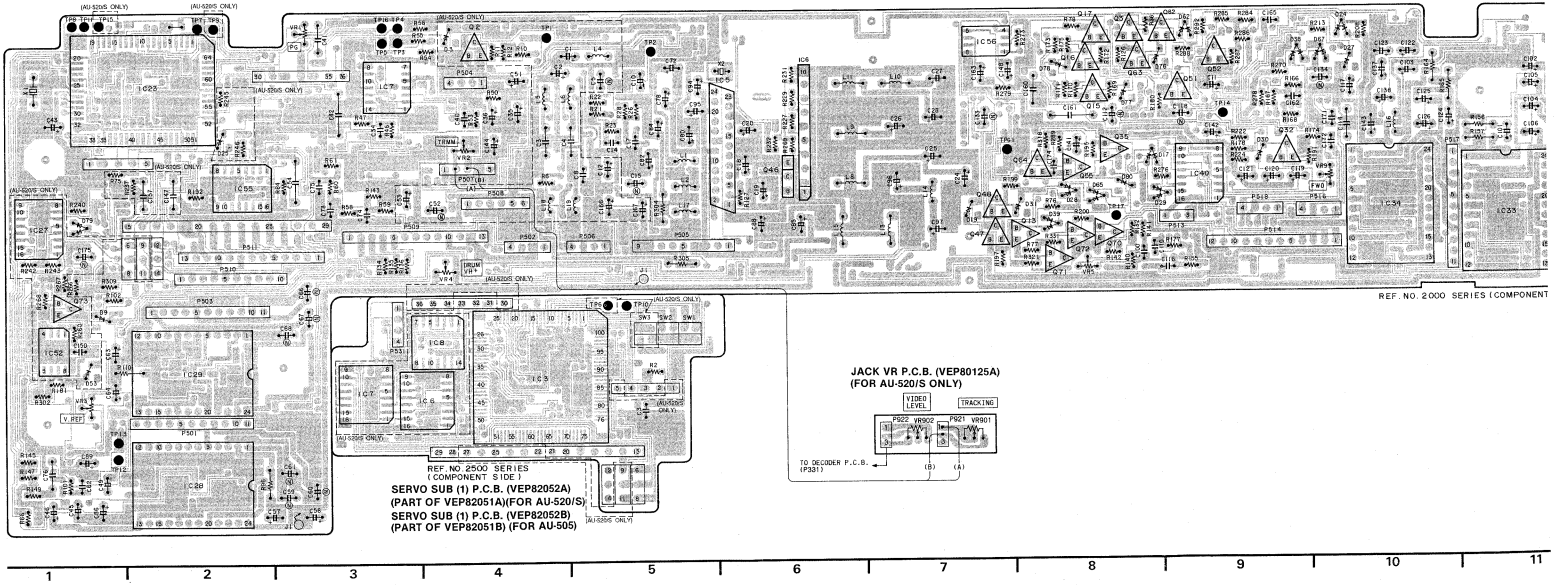
P.C. BOARD LOCATION


AUDIO
INPUT

REVERSE SIDE
SERVO P.C.B.

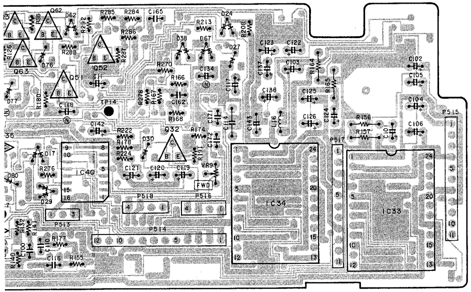
/O P.C. BOARD (VEP82051A) (FOR AU-520/S)
(VEP82051B) (FOR AU-505)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

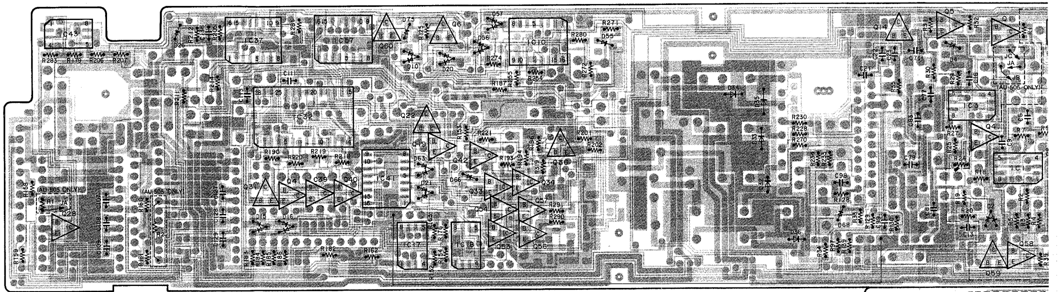


(AU-520/S ONLY)
TP8 TP11 TP15
TP7 TP9
TP16 TP4 TP5 TP3
TP1 TP2 TP6 TP10 TP12 TP13 TP14 TP17 TP51
IC23
IC7
IC55
IC27
IC52
IC29
IC28
IC5
IC6
IC8
IC3
IC56
IC40
IC34
IC33
Q2 Q17 Q3 Q82 Q16 Q63 Q15 Q51 Q52 Q35 Q32 Q64 Q55 Q46 Q48 Q47 Q13 Q72 Q70 Q71 Q73
X1 X2
VR1 VR2 VR3 VR4 VR5 VR9
PG
TRMM
DRUM VH
V.REF
FWD
P501 P502 P503 P504 P505 P506 P507(B) P508 P509 P510 P511 P513 P514 P516 P517 P518 P531
SW3 SW2 SW1
REF. NO. 2000 SERIES (COMPONENT
REF. NO. 2500 SERIES (COMPONENT SIDE)
JACK VR P.C.B. (VEP80125A)
(FOR AU-520/S ONLY)
VIDEO LEVEL
TRACKING
P922 VR902 P921 VR901
TO DECODER P.C.B. (P331)
(B)
(A)
1
2
3
4
5
6
7
8
9
10
11

SERVO SUB (1) P.C.B. (VEP82052A)
(PART OF VEP82051A)(FOR AU-520/S)
SERVO SUB (1) P.C.B. (VEP82052B)
(PART OF VEP82051B) (FOR AU-505)

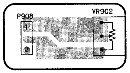

IC34
IC33
IC40
P514
P513
P515
P516
P517
P518
TP14
VR9
FWD

REF. NO. 2000 SERIES (COMPONENT SIDE)

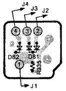

IC43
IC37
IC57
IC10
IC32
IC41
IC17
IC16
IC1
IC3
(AU-505 ONLY)

(FOIL SIDE) REF. NO. 2000 SERIES

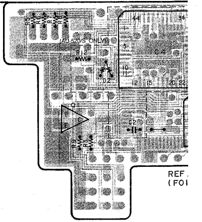
TRACKING VR (VEP80304A)
(FOR AU-505 ONLY)



CAP TRQ UP P.C.B.
(VEP82063A) (PART OF VEP82051A)
(FOR AU-520/S ONLY)


J4
J3
J2
J1
D82
D81
R835

REF. NO. 2000 SERIES

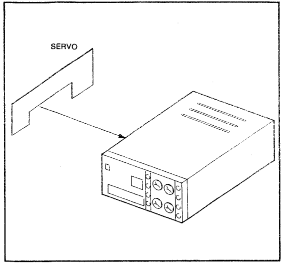

(AU-520/S ONLY)

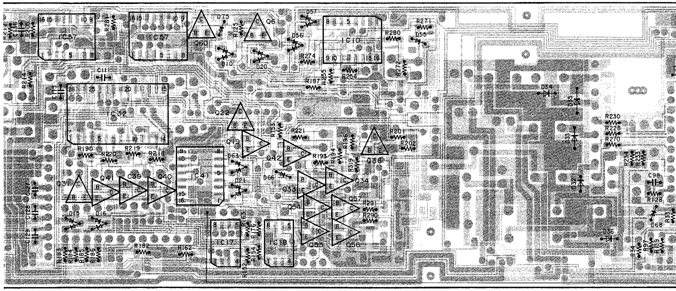
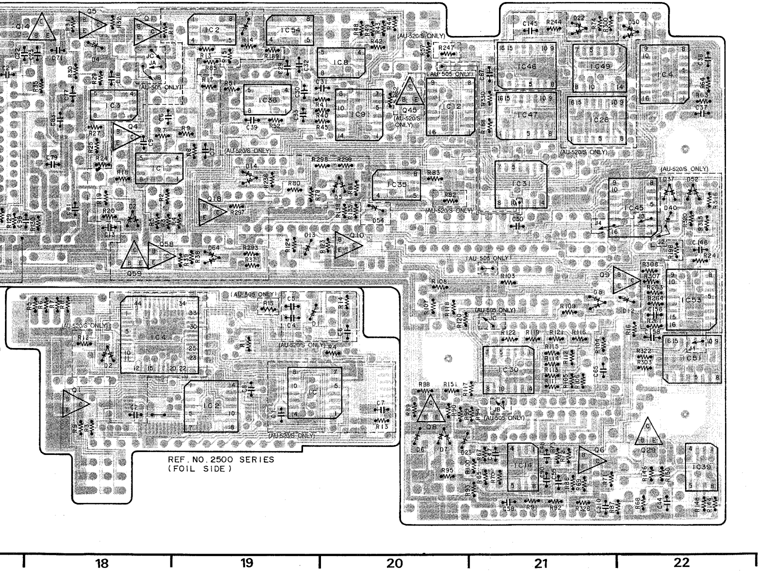
REF.
(FOI

9 10 11 12 13 14 15 16 17 18

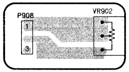
Effective from
Serial No. H9TNA0128 (FOR AU-505)

P.C. BOARD LOCATION

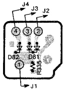




IC37
IC57
IC10
IC32
IC4
IC17
IC18
IC2
IC54
IC8
IC3
IC36
IC9
IC1
IC12
IC46
IC49
IC47
IC26
IC35
IC31
IC45
IC53
IC30
IC51
IC14
IC39
(AU-520/S ONLY)
(AU-505 ONLY)
REF. NO. 2500 SERIES
(FOIL SIDE)
13
14
15
16
17
18
19
20
21
22

TRACKING VR (VEP80304A)
(FOR AU-505 ONLY)



CAP TRQ UP P.C.B.
(VEP82063A) (PART OF VEP82051A)
(FOR AU-520/S ONLY)


J4
J3
J2
D82
D81
R335
J1

REF. NO. 2000 SERIES

SERVO P.C.B.

Transistors

Q2001	D-18
Q2002	D-4
Q2003	D-8
Q2004	C-18
Q2005	D-18
Q2006	A-21
Q2008	A-20
Q2009	B-21
Q2010	C-20
Q2013	C-8
Q2014	D-18
Q2015	D-8
Q2016	D-8
Q2017	D-8
Q2018	C-19
Q2019	C-14
Q2022	C-14
Q2028	C-12
Q2029	A-22
Q2031	C-13
Q2032	C-9
Q2033	C-15
Q2034	C-15
Q2035	C-8
Q2036	C-15
Q2039	C-14
Q2040	C-14
Q2041	C-14
Q2042	C-15
Q2045	D-20
Q2046	C-6
Q2047	C-7
Q2048	C-7
Q2051	D-9
Q2052	D-9
Q2053	C-15
Q2054	C-15
Q2055	C-8
Q2056	C-15
Q2057	C-15
Q2058	C-18
Q2059	B-18
Q2060	D-14
Q2061	D-15
Q2062	D-8
Q2063	D-8
Q2064	C-8
Q2070	C-8
Q2071	B-8
Q2072	B-8
Q2073	B-1
Q2501	B-18

Integrated Circuits

IC2001	C-18
IC2002	D-19
IC2003	D-18
IC2004	D-22
IC2005	D-6
IC2006	D-6
IC2007	D-3
IC2008	D-20
IC2009	C-20
IC2010	D-15
IC2012	D-20
IC2014	A-21
IC2017	C-14
IC2018	C-15
IC2023	D-2
IC2026	C-21
IC2027	C-1
IC2028	A-2
IC2029	B-2
IC2030	B-21
IC2031	C-21
IC2032	C-14
IC2033	C-11
IC2034	C-10
IC2035	C-20
IC2036	D-19
IC2037	D-13
IC2039	A-22
IC2040	C-9
IC2041	C-14
IC2043	D-12
IC2045	C-22
IC2046	D-21
IC2047	C-21
IC2049	D-21
IC2051	B-22
IC2052	B-1
IC2053	B-22
IC2054	D-19
IC2055	C-2
IC2056	D-7
IC2057	D-14
IC2501	B-19
IC2502	A-19
IC2503	B-4
IC2504	B-18
IC2506	B-3
IC2507	B-3
IC2508	B-4

Test Points

TP2001	D-4
TP2002	D-5
TP2003	D-3
TP2004	D-3
TP2005	D-3
TP2007	D-2
TP2008	D-1
TP2009	D-2
TP2011	D-1
TP2012	A-1
TP2013	A-1
TP2014	D-9
TP2015	D-1
TP2016	D-3
TP2017	C-8
TP2506	B-5
TP2510	B-5
TPG1	C-7

Adjustments

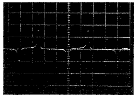
VR2001	D-3
VR2002	C-4
VR2003	B-1
VR2004	B-4
VR2009	C-10

Connectors

P2501	A-2
P2502	C-4
P2503	B-2
P2504	D-4
P2505	C-5
P2506	C-5
P2507	C-4
P2508	C-4
P2509	C-3
P2510	B-2
P2511	C-2
P2513	C-9
P2514	C-9
P2515	C-11
P2516	C-10
P2517	C-10
P2518	C-9
P2531	B-3

ADDRESS INFORMATION

SERVO WAVEFORMS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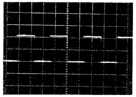
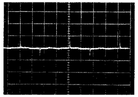
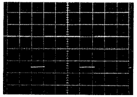
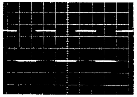
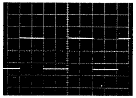
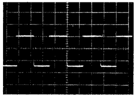

TP5
2V/0.2msec. div.

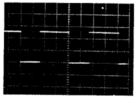

TP2
0.5V/10msec. div.


TP7
2V/10msec. div.


TP3
2V/0.5msec. div.

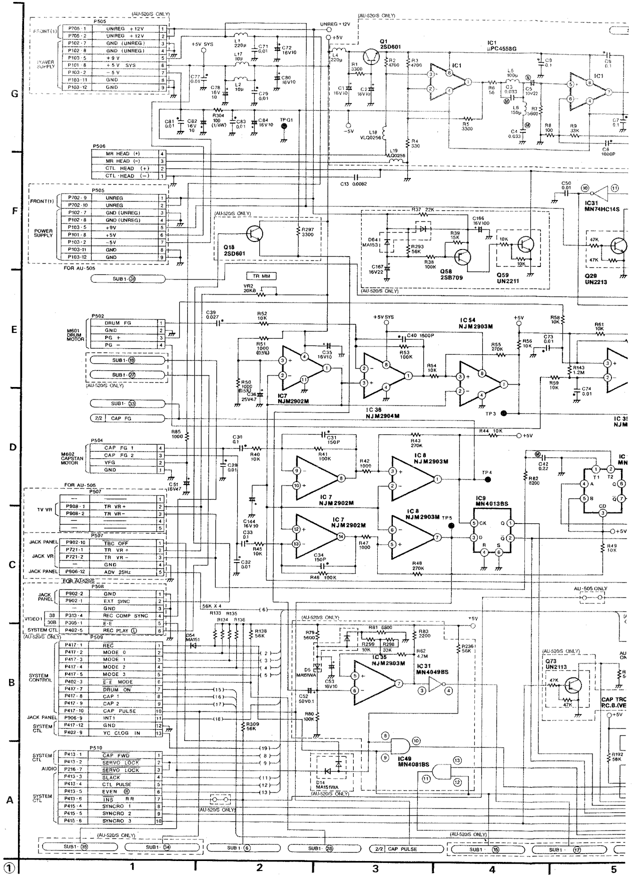

TP8, TP10, TP11
2V/10msec. div.


TP4
2V/0.2msec. div.


TP16
2V/10msec. div.

SERVO SCHEMATIC DIAGRAM

NOTE:
AU-5
AU-5


G
F
E
D
C
B
A
①
1
2
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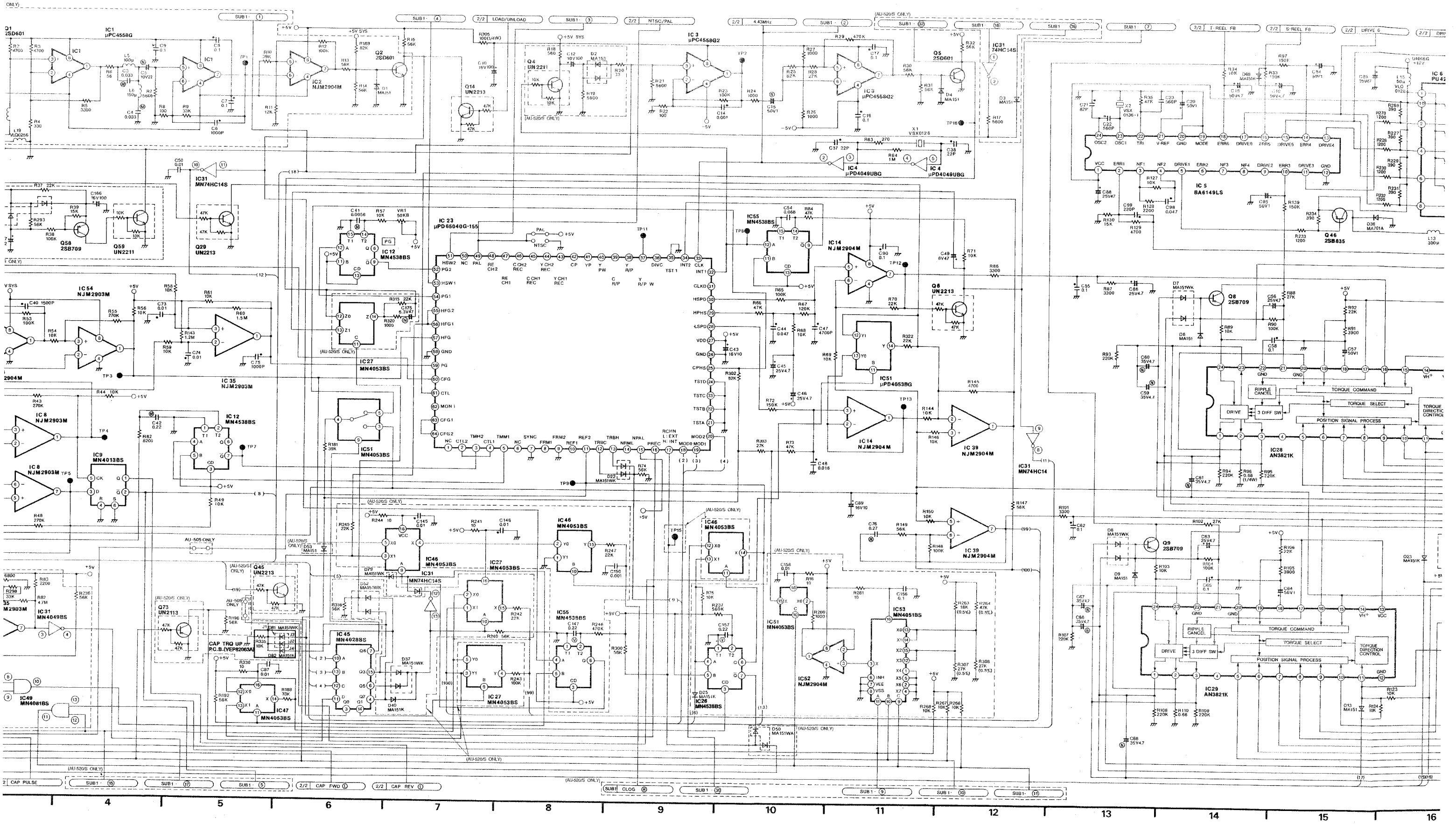
4
5
P505
P506
P502
P504
P507
P508
P509
P510
POWER SUPPLY
FRONT(1)
FOR AU-505
(AU-520/S ONLY)
UNREG +12V
+5V SYS
-5V
GND
MR HEAD (+)
MR HEAD (-)
CTL HEAD (+)
CTL HEAD (-)
M601 DRUM MOTOR
DRUM FG
PG +
PG -
M602 CAPSTAN MOTOR
CAP FG 1
CAP FG 2
VFG
TV VR
JACK PANEL
JACK VR
VIDEO1
SYSTEM CTL
SYSTEM CONTROL
AUDIO
REC
MODE 0
MODE 1
MODE 2
MODE 3
E-E MODE
DRUM ON
CAP 1
CAP 2
CAP PULSE
INT1
YC CLOG IN
CAP FWD
SERVO LOCK
SLACK
CTL PULSE
EVEN
INS
SYNCRO 1
SYNCRO 2
SYNCRO 3
Q1 2SD601
IC1 μPC4558G
Q18 2SD601
Q58 2SB709
Q59 UN2211
Q29 UN2213
IC31 MN74HC14S
IC54 NJM2903M
IC7 NJM2902M
IC36 NJM2904M
IC8 NJM2903M
IC9 MN4013BS
IC35 NJM2903M
IC31 MN4049BS
IC49 MN4081BS
Q73 UN2113
TPG1
TP3
TP4
TP5
VR2 20KB
SUB1
2/2 CAP FG
2/2 CAP PULSE
AU-505 ONLY

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


ONLY)
SUB1 ①
SUB1 ④
2/2 LOAD/UNLOAD
SUB1 ③
2/2 NTSC/PAL
2/2 4.43MHz
SUB1 ②
(AU-520/S ONLY)
SUB1 ㉜
SUB1 ⑱
SUB1 ⑯
SUB1 ⑦
2/2 T-REEL FB
2/2 S-REEL FB
2/2 DRIVE 6
Q1 2SD601
IC1 μPC4558G
IC1
IC2 NJM2904M
Q2 2SD601
Q14 UN2213
Q4 UN2211
(AU-520/S ONLY)
IC 3 μPC4558G2
IC3 μPC4558G2
Q5 2SD601
IC31 74HC14S
X1 VSX0126
IC4 μPD4049UBG
IC 4 μPD4049UBG
X2 VSX0126
IC 5 BA6149LS
IC 6 PU42
Q46 2SB835
IC31 MN74HC14S
Q58 2SB709
Q59 UN2211
Q29 UN2213
IC12 MN4538BS
IC 23 μPD65040G-155
PAL NTSC
IC55 MN4538BS
IC14 NJM2904M
Q6 UN2213
Q8 2SB709
IC 54 NJM2903M
IC27 MN4053BS
IC51 μPD4053BG
IC 35 NJM2903M
IC 8 NJM2903M
IC 12 MN4538BS
IC51 MN4053BS
IC 14 NJM2904M
IC 39 NJM2904M
IC28 AN3821K
IC9 MN4013BS
IC31 MN74HC14
IC 39 NJM2904M
Q9 2SB709
AU-505 ONLY
Q45 UN2213
IC46 MN4053BS
IC31 MN74HC14S
IC27 MN4053BS
IC46 MN4053BS
Q73 UN2113
CAP TRQ UP P.C.B.(VEP82063A)
IC 45 MN4028BS
IC 27 MN4053BS
IC55 MN4538BS
IC26 MN4538BS
IC51 MN4053BS
IC52 NJM2904M
IC53 MN4051BS
IC29 AN3821K
IC 31 MN4049BS
IC49 MN4081BS
IC47 MN4053BS
TORQUE COMMAND
TORQUE SELECT
TORQUE DIRECTION CONTROL
POSITION SIGNAL PROCESS
RIPPLE CANCEL
DRIVE
3 DIFF SW
(AU-520/S ONLY)
2 CAP PULSE
SUB1 ⑮
SUB1 ⑰
SUB1 ⑤
2/2 CAP FWD ①
2/2 CAP REV ①
SUB1 CLOG ⑭
SUB1 ㉚
SUB1 ⑨
SUB1 ⑩
SUB1 ⑪
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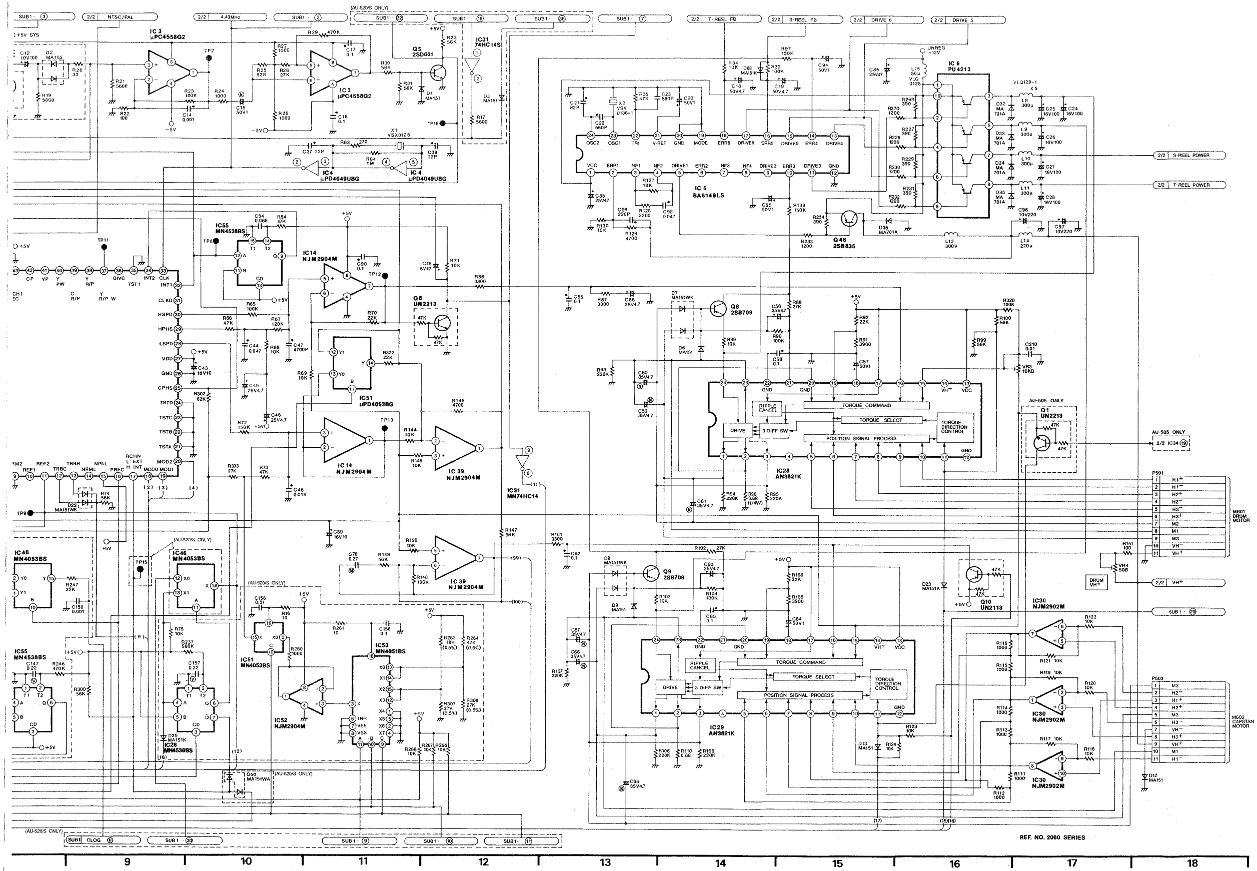
Effective from
Serial No. H9TNA0128 (FOR AU-505)


SUB1 ③
2/2 NTSC/PAL
2/2 4.43MHz
SUB1 ②
(AU-520/S ONLY)
SUB1 ㉜
SUB1 ⑯
SUB1 ㊱
SUB1 ⑦
2/2 T-REEL FB
2/2 S-REEL FB
2/2 DRIVE 6
2/2 DRIVE 5
+5V SYS
IC 3 μPC4558G2
Q5 2SD601
IC31 74HC14S
X1 VSX0128
IC4 μPD4049UBG
X2 VSX0136-1
IC 5 BA6149LS
IC 6 PU4213
VLQ129-1 X5
UNREG +12V
Q46 2SB835
2/2 S-REEL POWER
2/2 T-REEL POWER
IC55 MN4538BS
IC14 NJM2904M
Q6 UN2213
IC51 μPD4053BG
IC 39 NJM2904M
IC31 MN74HC14
Q8 2SB709
IC28 AN3821K
TORQUE COMMAND
RIPPLE CANCEL
TORQUE SELECT
DRIVE
3 DIFF SW
TORQUE DIRECTION CONTROL
POSITION SIGNAL PROCESS
AU-505 ONLY
Q1 UN2213
AU-505 ONLY 2/2 IC34 ⑲
P501
H1+
H1−
H2+
H2−
H3−
H3+
M2
M1
M3
VH−
VH+
M601 DRUM MOTOR
DRUM VH+
2/2 VH+
SUB1 ㉙
IC 46 MN4053BS
IC46 MN4053BS
(AU-520/S ONLY)
IC55 MN4538BS
IC26 MN4538BS
IC51 MN4053BS
IC52 NJM2904M
IC53 MN4051BS
D50 MA151WA
Q9 2SB709
IC29 AN3821K
Q10 UN2113
IC30 NJM2902M
P503
M602 CAPSTAN MOTOR
(AU-520/S ONLY)
SUB1 CLOG ⑩
SUB1 ㉝
SUB1 ⑨
SUB1 ⑯
SUB1 ⑪
REF. NO. 2000 SERIES
9
10
11
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14
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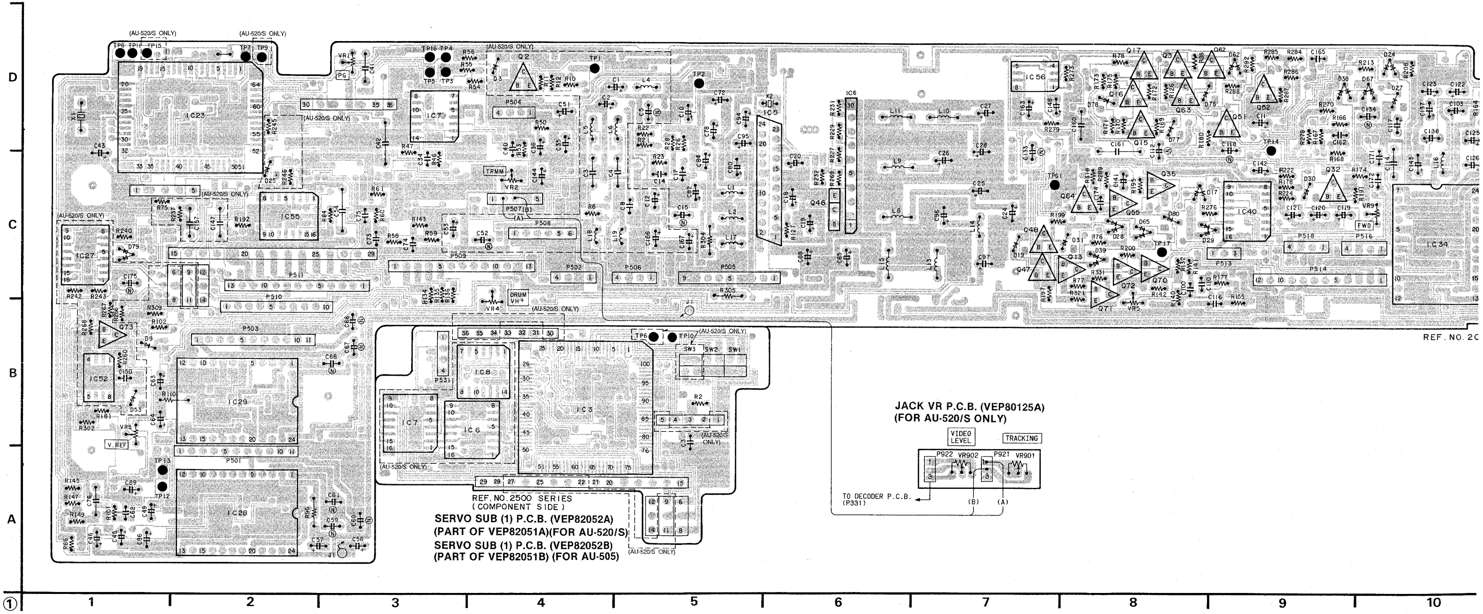
16
17
18

REVERSE SIDE

SERVO P.C.B.

SERVO P.C. BOARD (VEP82051A) (FOR AU-520/S)
(VEP82051B) (FOR AU-505)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY



D
C
B
A
①
1
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4
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6
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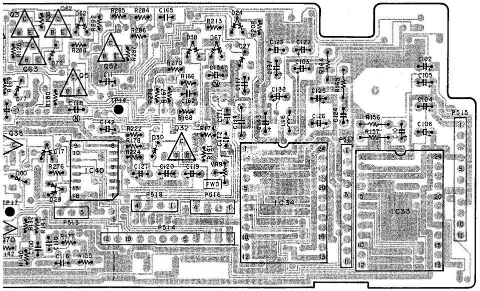
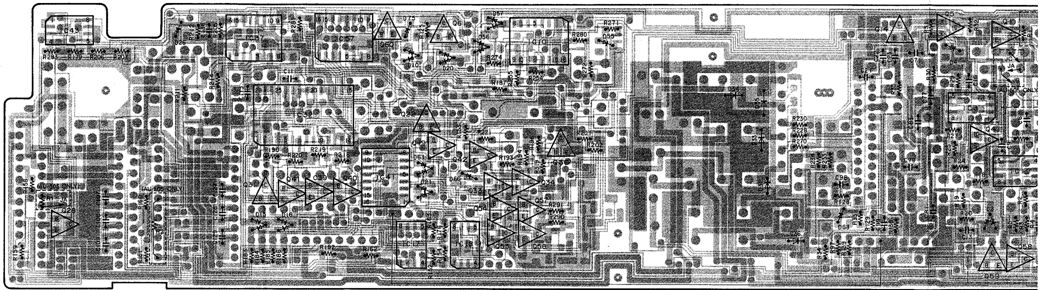
9
10
(AU-520/S ONLY)
TP8
TP11
TP15
TP7
TP9
IC23
IC27
IC55
IC52
IC29
IC28
IC7
IC8
IC6
IC3
IC5
IC6
IC56
IC40
IC34
Q2
Q3
Q13
Q15
Q16
Q17
Q35
Q46
Q47
Q48
Q51
Q52
Q55
Q62
Q63
Q64
Q70
Q71
Q72
Q73
TP1
TP2
TP3
TP4
TP5
TP6
TP10
TP12
TP13
TP14
TP16
TP17
TP51
VR1
VR2
VR3
VR4
VR5
VR9
X1
X2
TRMM
DRUM VH+
V.REF
FWD
SW1
SW2
SW3
P501
P502
P503
P504
P505
P506
P507(B)
P508
P509
P510
P511
P513
P514
P516
P518
P531
PG
REF. NO. 2C
REF. NO. 2500 SERIES
(COMPONENT SIDE)
SERVO SUB (1) P.C.B. (VEP82052A)
(PART OF VEP82051A)(FOR AU-520/S)
SERVO SUB (1) P.C.B. (VEP82052B)
(PART OF VEP82051B) (FOR AU-505)
JACK VR P.C.B. (VEP80125A)
(FOR AU-520/S ONLY)
VIDEO LEVEL
TRACKING
P922
VR902
P921
VR901
TO DECODER P.C.B. (P331)
(B)
(A)

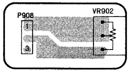

IC40
IC34
IC33
Q52
Q32
TP14
TP17
P513
P514
P515
P516
P518
VR9
FWD

REF. NO. 2000 SERIES (COMPONENT SIDE)

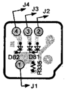

IC43
(AU-505 ONLY)
IC37
IC57
IC32
IC54
Q60
Q6
Q5

(FOIL SIDE) REF. NO. 2000 SERIES

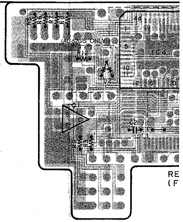
TRACKING VR (VEP80304A)
(FOR AU-505 ONLY)


P908
VR902
1
3

CAP TRQ UP P.C.B.
(VEP82063A) (PART OF VEP82051A)
(FOR AU-520/S ONLY)


J4
J3
J2
J1
D82
D81
R335

REF. NO. 2000 SERIES

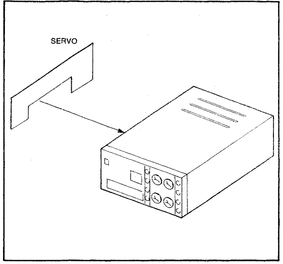


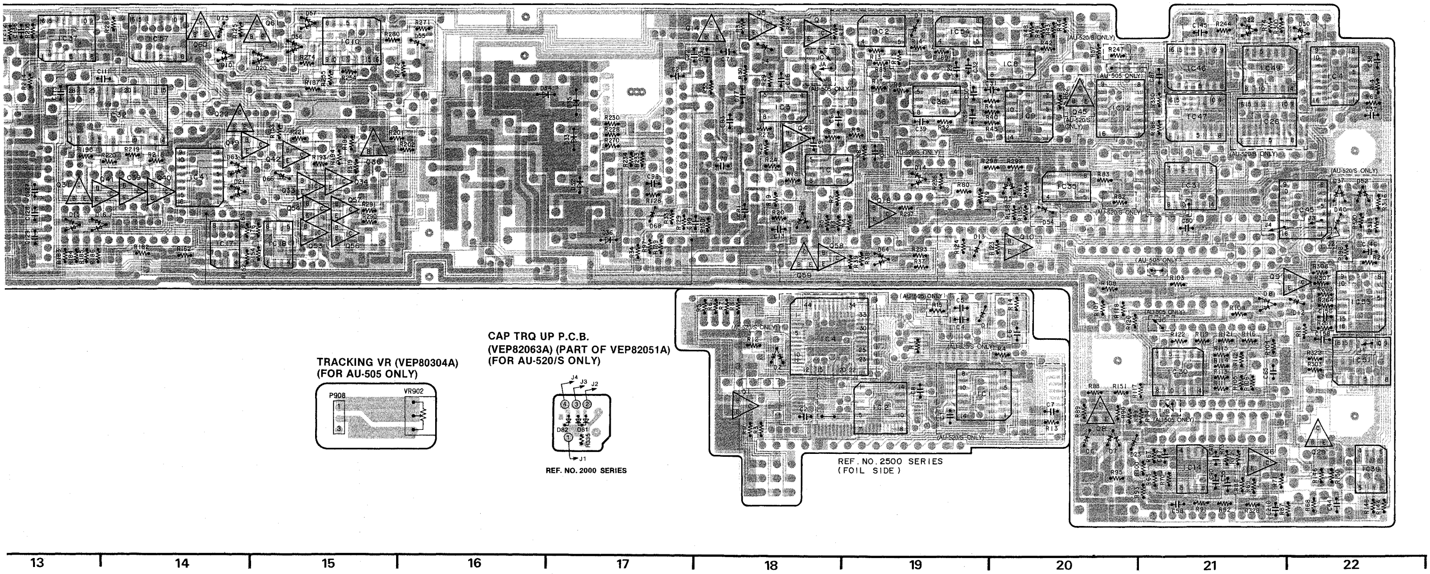
RE
(F

9 10 11 12 13 14 15 16 17 18

Effective from
Serial No. H9TNA0128 (FOR AU-505)

P.C. BOARD LOCATION




IC37
IC57
IC10
IC32
IC41
IC17
IC18
IC2
IC54
IC8
IC3
IC36
IC9
IC12
IC46
IC49
IC47
IC26
IC35
IC31
IC45
IC4
IC52
IC20
IC14
IC39
(AU-505 ONLY)
(AU-520/S ONLY)
13
14
15
16
17
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19
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21
22

TRACKING VR (VEP80304A)
(FOR AU-505 ONLY)

P908
VR902

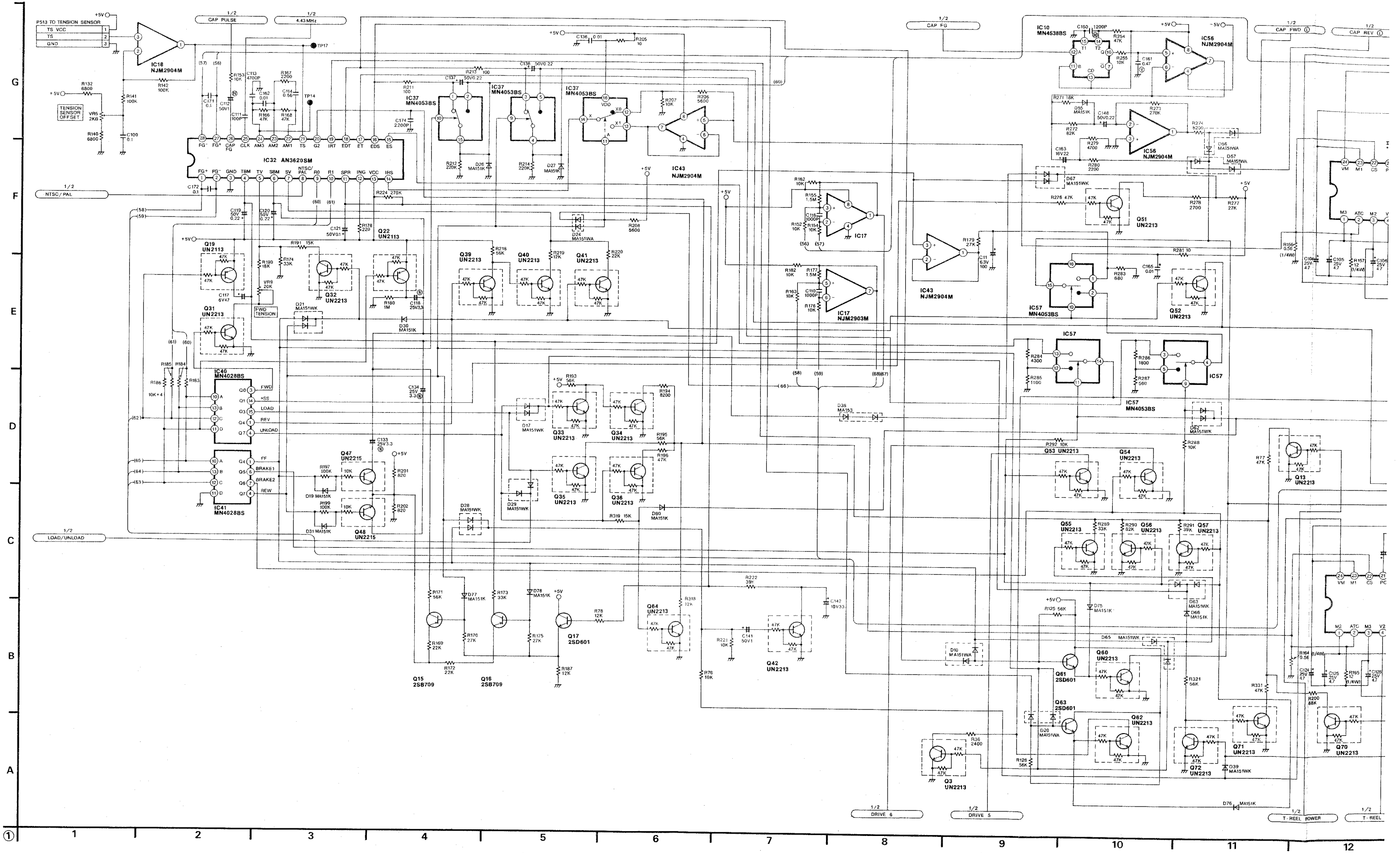
CAP TRQ UP P.C.B.
(VEP82063A) (PART OF VEP82051A)
(FOR AU-520/S ONLY)

J4
J3
J2
J1
D82
D81
R835

REF. NO. 2000 SERIES

REF. NO. 2500 SERIES
(FOIL SIDE)

SERVO (REEL SERVO SECTION) SCHEMATIC DIAGRAM


P513 TO TENSION SENSOR
TS VCC
TS
GND
IC18 NJM2904M
TENSION SENSOR OFFSET
1/2 CAP PULSE
1/2 4.43MHz
TP17
TP14
IC32 AN3620SM
1/2 NTSC/PAL
IC37 MN4053BS
IC43 NJM2904M
IC17
IC17 NJM2903M
Q19 UN2113
Q22 UN2113
Q31 UN2213
Q32 UN2213
Q39 UN2213
Q40 UN2213
Q41 UN2213
FWD TENSION
IC40 MN4028BS
IC41 MN4028BS
FWD
+SS
LOAD
REV
UNLOAD
FF
BRAKE1
BRAKE2
REW
Q47 UN2215
Q48 UN2215
Q33 UN2213
Q34 UN2213
Q35 UN2213
Q36 UN2213
Q15 2SB709
Q16 2SB709
Q17 2SD601
Q64 UN2213
Q42 UN2213
1/2 LOAD/UNLOAD
1/2 CAP FG
IC10 MN4538BS
IC56 NJM2904M
IC55 NJM2904M
IC57 MN4053BS
Q51 UN2213
Q52 UN2213
Q53 UN2213
Q54 UN2213
Q55 UN2213
Q56 UN2213
Q57 UN2213
Q60 UN2213
Q61 2SD601
Q62 UN2213
Q63 2SD601
Q3 UN2213
Q71 UN2213
Q72 UN2213
Q13 UN2213
Q70 UN2213
1/2 CAP FWD
1/2 CAP REV
1/2 DRIVE 6
1/2 DRIVE 5
1/2 T-REEL POWER
1/2 T-REEL
G
F
E
D
C
B
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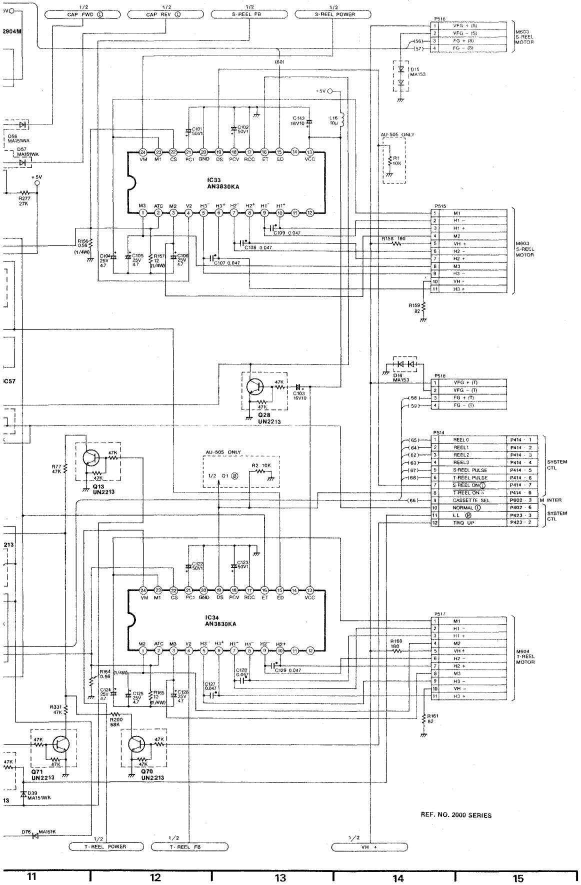
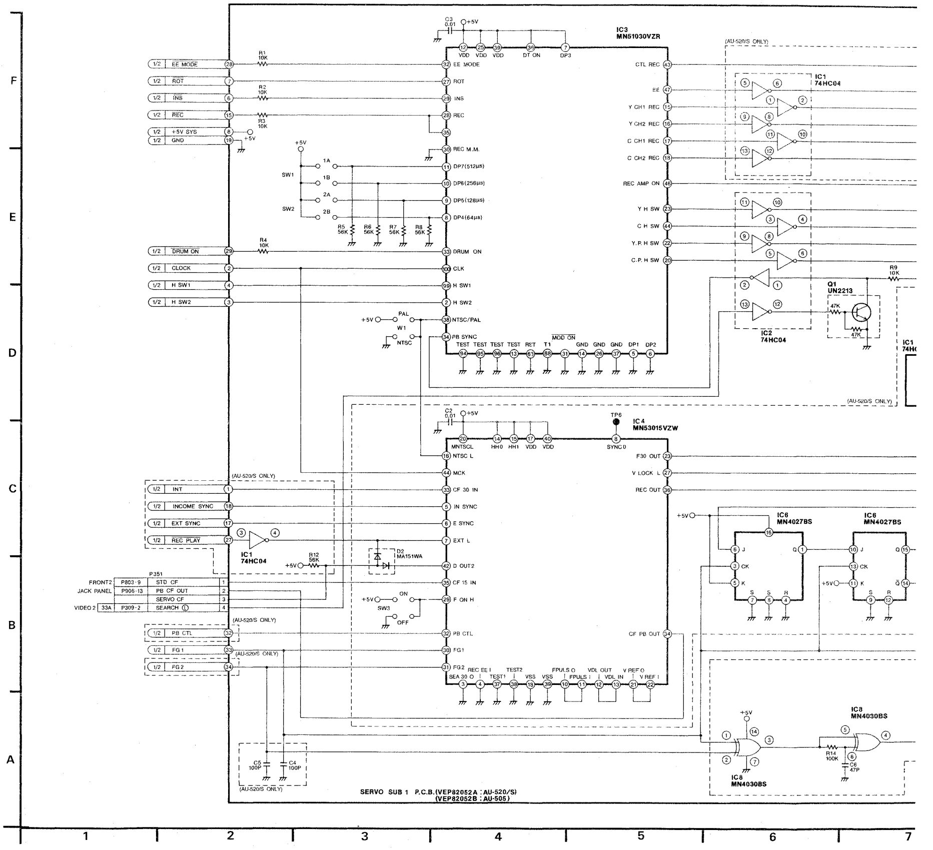
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


1/2 CAP FWD ⓛ
1/2 CAP REV ⓛ
1/2 S-REEL FG
1/2 S-REEL POWER
P516
M603 S-REEL MOTOR
D15 MA153
+5V
C143 16V10
L16 10μ
AU-505 ONLY
R1 10K
IC33 AN3830KA
VM M1 CS PC1 GND DS PCV RCC ET ED VCC
M3 ATC M2 V2 H3⁻ H3⁺ H2⁻ H2⁺ H1⁻ H1⁺
C101 50V1
C102 50V1
C109 0.047
C108 0.047
C107 0.047
R158 180
P515
M1 H1 − H1 + M2 VH + H2 − H2 + M3 H3 − VH − H3 +
R156 0.56 (1/4W)
C104 25V 4.7
C105 25V 4.7
R157 12 (1/4W)
C106 25V 4.7
R159 82
D56 MA151WA
D57 MA151WA
R277 27K
Q28 UN2213
C103 16V10
D16 MA153
P518
M603 S-REEL MOTOR
VFG + (T) VFG − (T) FG + (T) FG − (T)
P514
REEL0 REEL1 REEL2 REEL3 S-REEL PULSE T-REEL PULSE S-REEL ON ⓛ T-REEL ON ⓛ CASSETTE SEL NORMAL ⓛ LL ⓗ TRQ UP
P414 · 1 P414 · 2 P414 · 3 P414 · 4 P414 · 5 P414 · 6 P414 · 7 P414 · 8 P602 · 3 P402 · 6 P423 · 3 P423 · 2
SYSTEM CTL
M INTER
AU-505 ONLY
1/2 Q1 ⓑ
R2 10K
Q13 UN2213
R77 47K
IC34 AN3830KA
C122 50V1
C123 50V1
P517
M604 T-REEL MOTOR
R160 180
R164 0.56
R165 12 (1/4W)
C124 25V 4.7
C125 25V 4.7
C126 25V 4.7
C127 0.047
C128 0.047
C129 0.047
R161 82
R331 47K
R200 68K
Q71 UN2213
Q70 UN2213
D39 MA151WK
D76 MA151K
1/2 T-REEL POWER
1/2 T-REEL FG
1/2 VH +
11 12 13 14 15

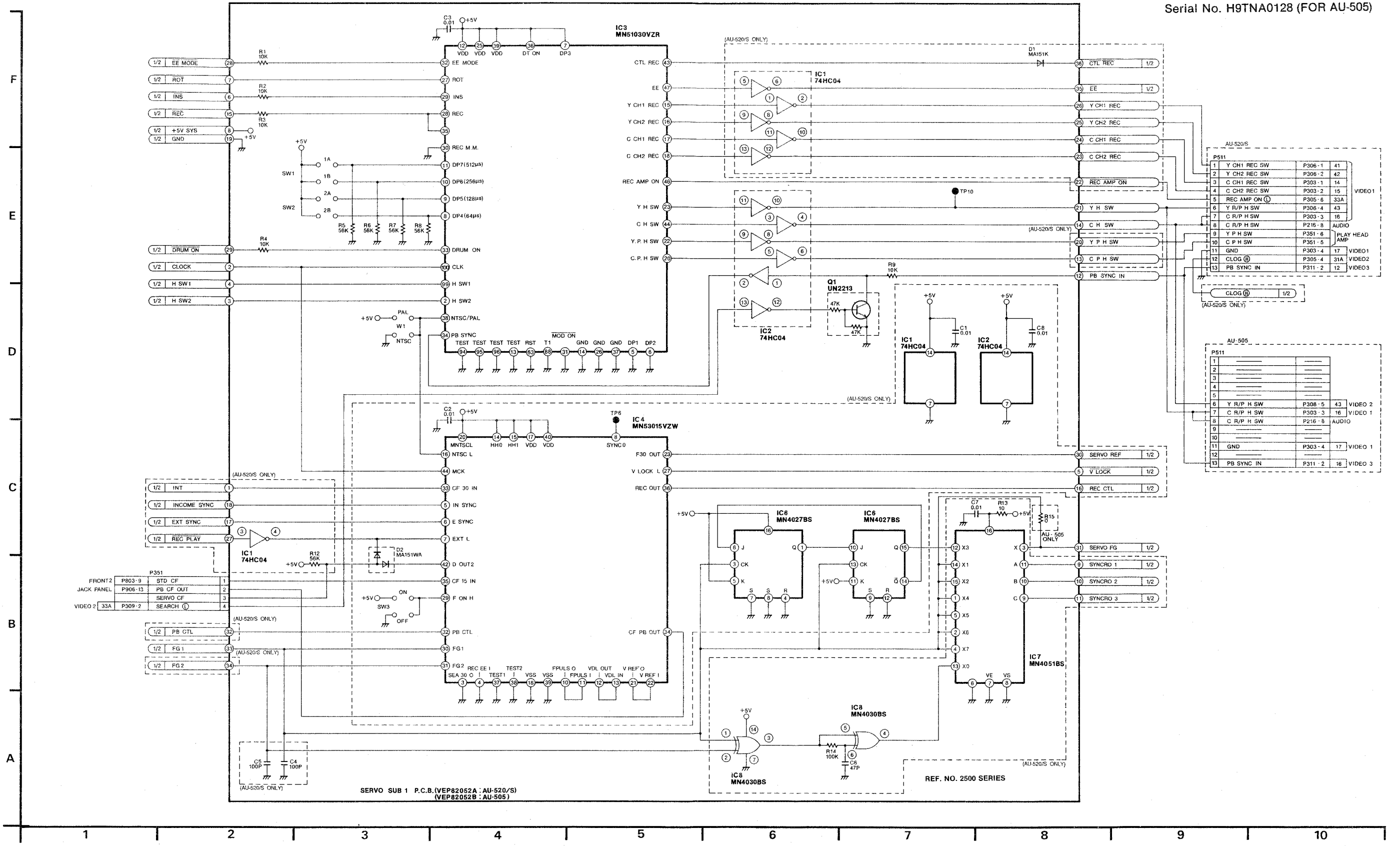
REF. NO. 2000 SERIES

SERVO SUB (1) SCHEMATIC DIAGRAM


F E D C B A
1 2 3 4 5 6 7
IC3 MN51030VZR
C3 0.01
+5V
VDD VDD VDD DT ON DP3
1/2 EE MODE
1/2 ROT
1/2 INS
1/2 REC
1/2 +5V SYS
1/2 GND
R1 10K
R2 10K
R3 10K
EE MODE ROT INS REC REC M.M.
DP7(512μs) DP6(256μs) DP5(128μs) DP4(64μs)
SW1 1A 1B
SW2 2A 2B
R5 56K R6 56K R7 56K R8 56K
1/2 DRUM ON
1/2 CLOCK
1/2 H SW1
1/2 H SW2
R4 10K
DRUM ON CLK H SW1 H SW2 NTSC/PAL PB SYNC
PAL W1 NTSC
TEST TEST TEST TEST RST T1 MOD ON GND GND GND DP1 DP2
CTL REC EE Y CH1 REC Y CH2 REC C CH1 REC C CH2 REC REC AMP ON Y H SW C H SW Y.P. H SW C.P. H SW
(AU-520/S ONLY)
IC1 74HC04
IC2 74HC04
Q1 UN2213
R9 10K
47K
IC4 MN53015VZW
C2 0.01
TP6
MNTSCL HH0 HH1 VDD VDD SYNC0
NTSC L MCK CF 30 IN IN SYNC E SYNC EXT L D OUT2 CF 15 IN F ON H PB CTL FG1 FG2
F30 OUT V LOCK L REC OUT CF PB OUT
REC EE I SEA 30 O TEST1 TEST2 VSS VSS FPULS O FPULS I VDL OUT VDL IN V REF O V REF I
1/2 INT
1/2 INCOME SYNC
1/2 EXT SYNC
1/2 REC PLAY
1/2 PB CTL
1/2 FG1
1/2 FG2
IC1 74HC04
R12 56K
D2 MA151WA
SW3 ON OFF
P351
FRONT2 P803 · 9 STD CF
JACK PANEL P906 · 13 PB CF OUT
SERVO CF
VIDEO 2 33A P309 · 2 SEARCH ⓛ
C5 100P
C4 100P
IC6 MN4027BS
J CK K Q Q̄ S R
IC8 MN4030BS
R14 100K
C6 47P
SERVO SUB 1 P.C.B.(VEP82052A : AU-520/S)
(VEP82052B : AU-505)

SERVO SUB (1) SCHEMATIC DIAGRAM

Effective from
Serial No. H9TNA0128 (FOR AU-505)


IC3
MN51030VZR
IC4
MN53015VZW
IC1
74HC04
IC2
74HC04
IC6
MN4027BS
IC7
MN4051BS
IC8
MN4030BS
Q1
UN2213
D1
MA151K
D2
MA151WA
TP6
TP10
SW1
SW2
SW3
PAL
NTSC
ON
OFF
EE MODE
ROT
INS
REC
+5V SYS
GND
DRUM ON
CLOCK
H SW1
H SW2
INT
INCOME SYNC
EXT SYNC
REC PLAY
PB CTL
FG1
FG2
CTL REC
EE
Y CH1 REC
Y CH2 REC
C CH1 REC
C CH2 REC
REC AMP ON
Y H SW
C H SW
Y P H SW
C P H SW
PB SYNC IN
CLOG Ⓡ
SERVO REF
V LOCK
REC CTL
SERVO FG
SYNCRO 1
SYNCRO 2
SYNCRO 3
AU-520/S
AU-505
P511
P351
FRONT2
JACK PANEL
VIDEO 2
STD CF
PB CF OUT
SERVO CF
SEARCH Ⓛ
(AU-520/S ONLY)
AU-505 ONLY
VIDEO1
VIDEO2
VIDEO3
AUDIO
PLAY HEAD AMP
REF. NO. 2500 SERIES
SERVO SUB 1 P.C.B.(VEP82052A : AU-520/S)
(VEP82052B : AU-505)
F
E
D
C
B
A
1
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3
4
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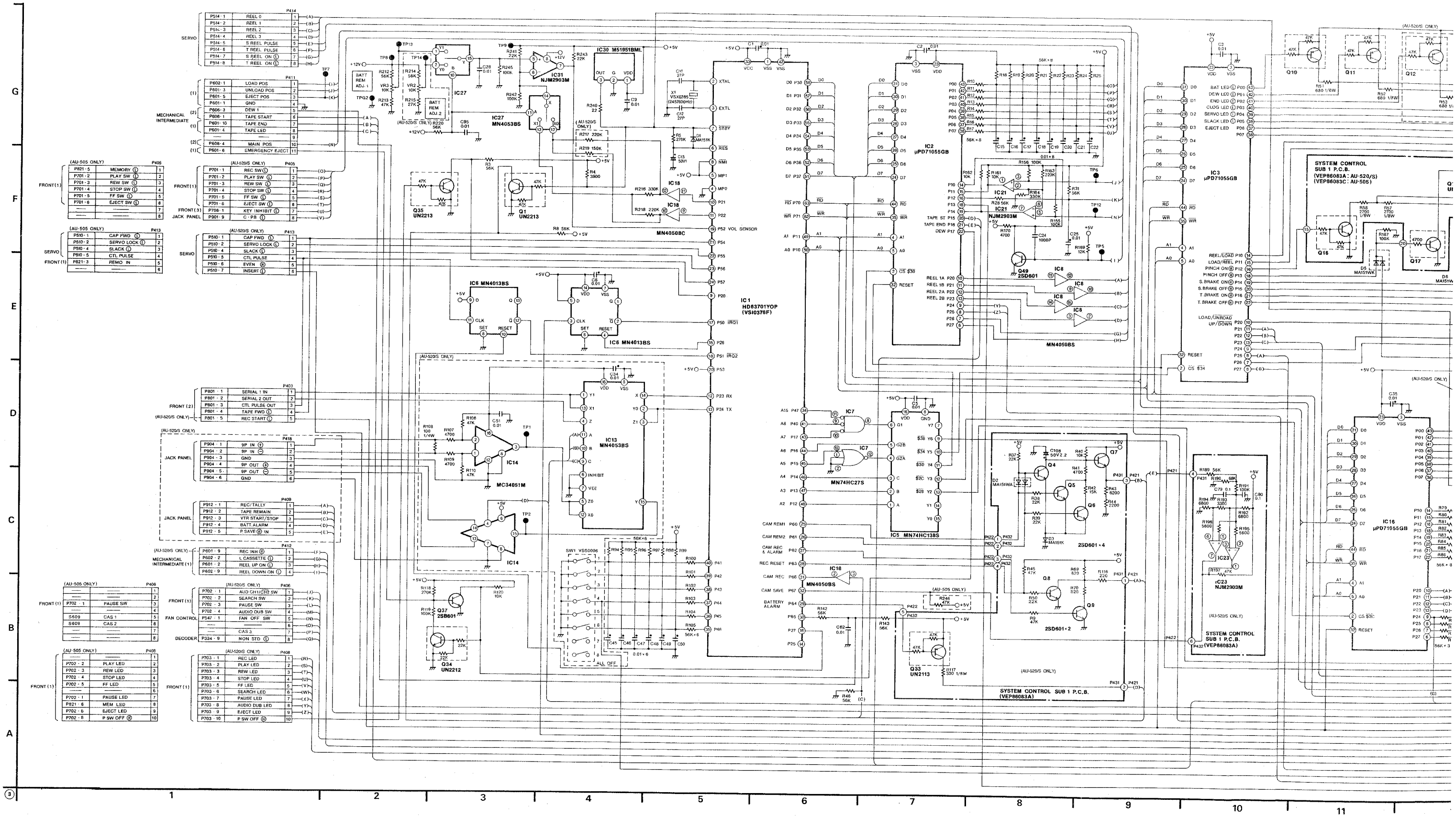
6
7
8
9
10

REVERSE SIDE

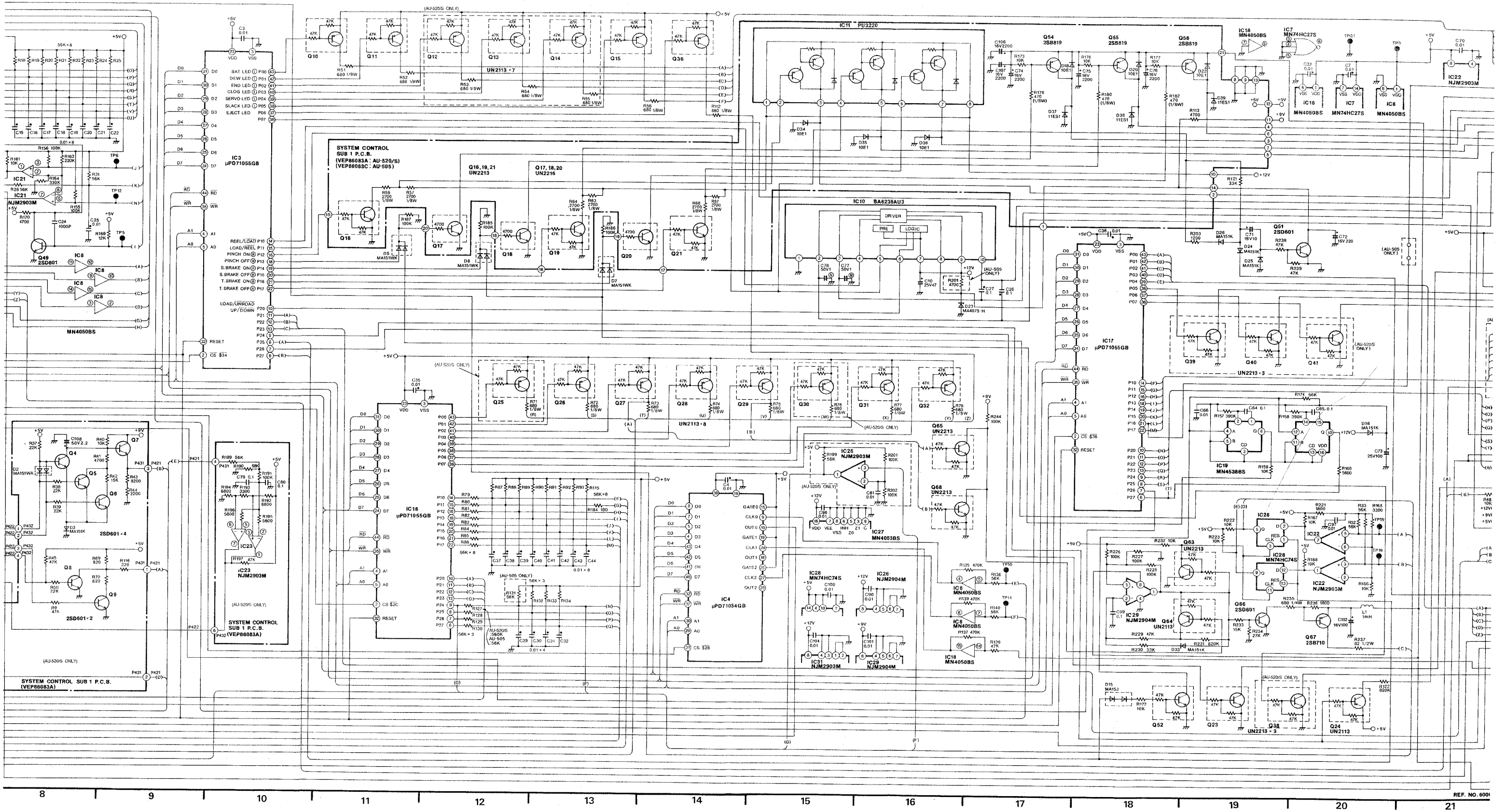
**SYSTEM CTL
SCHEMATIC DIAGRAM**

SYSTEM CONTROL SCHEMATIC DIAGRAM

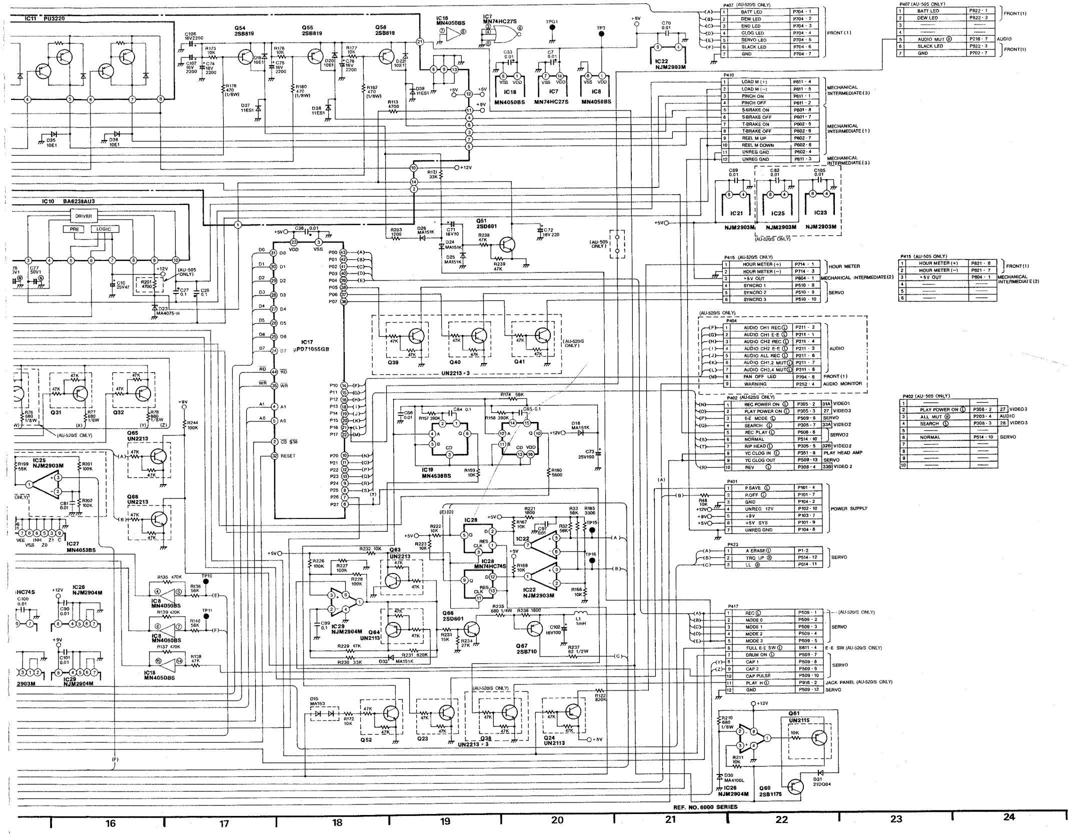
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY



IC1 HD63701Y0P (VSI0378F)
IC2 μPD71055GB
IC3 μPD71055GB
IC5 MN74HC138S
IC6 MN4013BS
IC7 MN74HC27S
IC8 MN4050BS
IC13 MN4053BS
IC14 MC34051M
IC15 μPD71055GB
IC18 MN4050BC
IC21 NJM2903M
IC23 NJM2903M
IC27 MN4053BS
IC30 M51951BML
IC31 NJM2903M
Q1 UN2213
Q33 UN2113
Q34 UN2212
Q35 UN2213
Q37 2SB601
Q49 2SD601
2SD601×4
2SD601×2
SW1 VS50096
ALL OFF
X1 VSX0285 (2457600Hz)
SYSTEM CONTROL SUB 1 P.C.B. (VEP86083A: AU-520/S) (VEP86083C: AU-505)
SYSTEM CONTROL SUB 1 P.C.B. (VEP86083A)
SERVO
MECHANICAL INTERMEDIATE
FRONT
JACK PANEL
FAN CONTROL
DECODER
(AU-505 ONLY)
(AU-520/S ONLY)
BATT REM ADJ.1
BATT REM ADJ.2
P414
P411
P405
P413
P403
P418
P409
P412
P406
P408
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11


SYSTEM CONTROL SUB 1 P.C.B.
(VEP86083A : AU-520/S)
(VEP86083C : AU-505)
IC3 μPD71055GB
IC16 μPD71055GB
IC17 μPD71055GB
IC4 μPD71054GB
IC11 PU3220
IC10 BA6238AU3
DRIVER
PRE
LOGIC
IC21 NJM2903M
IC8 MN4050BS
IC18 MN4050BS
IC7 MN74HC27S
IC22 NJM2903M
IC23 NJM2903M
IC25 NJM2903M
IC27 MN4053BS
IC28 MN74HC74S
IC26 NJM2904M
IC29 NJM2904M
IC31 NJM2903M
IC19 MN4538BS
Q54 2SB819
Q55 2SB819
Q56 2SB819
Q49 2SD601
Q51 2SD601
Q66 2SD601
Q67 2SB710
Q16,19,21 UN2213
Q17,18,20 UN2216
UN2113 × 7
UN2113 × 8
UN2213 × 3
2SD601 × 4
2SD601 × 2
BAT LED
DEW LED
END LED
CLOG LED
SERVO LED
SLACK LED
EJECT LED
REEL/LOAD
LOAD/REEL
PINCH ON
PINCH OFF
S.BRAKE ON
S.BRAKE OFF
T.BRAKE ON
T.BRAKE OFF
LOAD/UNROAD
UP/DOWN
RESET
CS $34
CS $38
CS $2C
CS $28
GATE0
CLK0
OUT0
GATE1
CLK1
OUT1
GATE2
CLK2
OUT2
(AU-520/S ONLY)
(AU-505 ONLY)
SYSTEM CONTROL SUB 1 P.C.B. (VEP86083A)
+5V
+9V
+12V
TP5
TP6
TP10
TP11
TP12
TP15
TP16
8
9
10
11
12
13
14
15
16
17
18
19
20
21
REF. NO. 6000

Effective from
Serial No. H9TNA0128 (FOR AU-505)


IC11 PU3220
Q54 2SB819
Q55 2SB819
Q56 2SB819
IC18 MN4050BS
IC7 MN74HC27S
TPG1
TP3
IC22 NJM2903M
IC18 MN4050BS
IC7 MN74HC27S
IC8 MN4050BS
P407 (AU-520/S ONLY)
BATT LED
DEW LED
END LED
CLOG LED
SERVO LED
SLACK LED
GND
FRONT (1)
P407 (AU-505 ONLY)
AUDIO MUT
AUDIO
P410
LOAD M (+)
LOAD M (−)
PINCH ON
PINCH OFF
S-BRAKE ON
S-BRAKE OFF
T-BRAKE ON
T-BRAKE OFF
REEL M UP
REEL M DOWN
UNREG GND
UNREG GND
MECHANICAL INTERMEDIATE (3)
MECHANICAL INTERMEDIATE (1)
IC10 BA6238AU3
DRIVER
PRE
LOGIC
IC21
IC25
IC23
NJM2903M
Q51 2SD601
IC17 µPD71055GB
P415 (AU-520/S ONLY)
HOUR METER (+)
HOUR METER (−)
+5V OUT
SYNCRO 1
SYNCRO 2
SYNCRO 3
HOUR METER
MECHANICAL INTERMEDIATE (2)
SERVO
P415 (AU-505 ONLY)
P404
AUDIO CH1 REC
AUDIO CH1 E-E
AUDIO CH2 REC
AUDIO CH2 E-E
AUDIO ALL REC
AUDIO CH1.2 MUT
AUDIO CH3.4 MUT
FAN OFF LED
WARNING
AUDIO MONITOR
Q39
Q40
Q41
UN2213 × 3
P402 (AU-520/S ONLY)
REC POWER ON
PLAY POWER ON
E-E MODE
SEARCH
REC PLAY
NORMAL
R/P HEAD
YC CLOG IN
YC CLOG OUT
REV
VIDEO 1
VIDEO 3
VIDEO 2
PLAY HEAD AMP
P402 (AU-505 ONLY)
ALL MUT
IC19 MN4538BS
Q31
Q32
Q65 UN2213
IC25 NJM2903M
Q68 UN2213
IC27 MN4053BS
P401
P.SAVE
P.OFF
GND
UNREG 12V
+9V
+5V SYS
UNREG GND
POWER SUPPLY
IC28
IC28 MN74HC74S
IC22 NJM2903M
Q63 UN2213
IC29 NJM2904M
Q64 UN2113
Q66 2SD601
Q67 2SB710
IC26 NJM2904M
IC8 MN4050BS
IC18 MN4050BS
IC29 NJM2904M
P423
A ERASE
TRG UP
LL
P417
REC
MODE 0
MODE 1
MODE 2
MODE 3
FULL E-E SW
DRUM ON
CAP 1
CAP 2
CAP PULSE
PLAY H
GND
E-E SW (AU-520/S ONLY)
JACK PANEL (AU-520/S ONLY)
Q52
Q23
Q38
UN2213 × 3
Q24 UN2113
Q61 UN2115
IC26 NJM2904M
Q60 2SB1175
D30 MA4100L
D31 21DQ04
REF. NO. 6000 SERIES
16
17
18
19
20
21
22
23
24

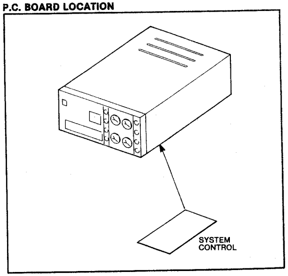
SYSTEM CONTROL P.C.B.	
Transistors	
Q6001	A-3
Q6010	A-12
Q6011	A-13
Q6012	A-13
Q6013	A-1
Q6014	A-12
Q6015	A-1
Q6023	B-12
Q6024	B-11
Q6025	C-5
Q6026	C-5
Q6027	C-6
Q6028	C-6
Q6029	C-6
Q6030	C-5
Q6031	C-8
Q6032	C-8
Q6034	C-8
Q6035	C-8
Q6036	D-11
Q6037	C-9
Q6038	D-11
Q6039	C-11
Q6040	B-10
Q6041	B-10
Q6049	B-4
Q6051	A-12
Q6052	B-12
Q6060	C-1
Q6061	C-12
Q6063	B-8
Q6064	B-7
Q6065	B-7
Q6066	B-8
Q6067	B-8
Q6068	C-7
Integrated Circuits	
IC6001	A-4
IC6002	B-4
IC6003	B-2
IC6004	A-2
IC6005	A-10
IC6006	A-10
IC6007	A-10
IC6008	B-10
IC6010	C-2
IC6013	A-9
IC6014	A-8
IC6016	B-5
IC6017	B-3
IC6018	A-9
IC6019	B-12
IC6021	B-9
IC6022	B-8
IC6025	C-7
IC6026	C-13
IC6027	B-12
IC6028	B-6
IC6029	B-8
IC6030	A-11
IC6031	C-12
Test Points	
TP6001	B-6
TP6002	A-5
TP6003	C-6
TP6005	C-4
TP6006	C-5
TP6007	C-4
TP6008	C-3
TP6009	C-3
TP6010	C-4
TP6011	C-4
TP6012	C-5
TP6013	B-2
TP6014	B-2
TP6015	C-5
TP6016	C-5
TP6017	B-6
TPG6001	C-6
TPG6002	B-2
Adjustments	
VR6002	B-2
VR6003	B-2
Connectors	
P401	C-3
P402	C-3
P403	C-7
P404	B-2
P405	C-3
P406	C-4
P407	A-1
P408	C-6
P409	B-7
P410	C-2
P411	C-4
P412	C-5
P413	C-7
P414	C-4
P415	B-4
P417	C-3
P418	B-7
P421	B-6
P422	B-5
P423	B-1
Switch	
SW1	A-6

ADDRESS INFORMATION

SYSTEM CONTROL SUB (1) P.C.B.	
Transistors	
Q6004	F-6
Q6005	F-6
Q6006	E-6
Q6007	F-6
Q6008	F-7
Q6009	F-7
Q6016	D-7
Q6017	D-6
Q6018	D-6
Q6019	D-7
Q6020	D-6
Q6021	D-6
Q6033	F-7
Q6054	E-7
Q6055	E-6
Q6056	E-5
Integrated Circuits	
IC6011	E-6
IC6023	E-7
Connectors	
P431	F-7
P432	E-7

ADDRESS INFORMATION

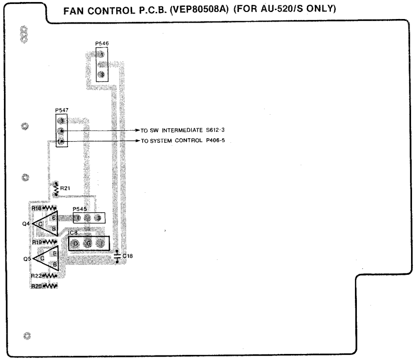
P.C. BOARD LOCATION


SYSTEM CONTROL

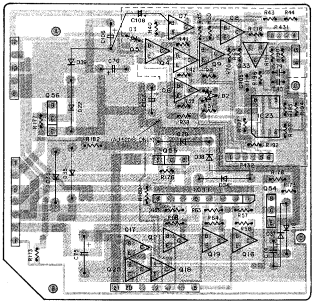
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

SYSTEM CONTROL P.C. BOARD (VEP86082A) (FOR AU-520/S)
(VEP86082C) (FOR AU-505)

FAN CONTROL P.C.B. (VEP80508A) (FOR AU-520/S ONLY)

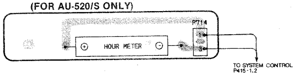

P546
P547
TO SW INTERMEDIATE S612-3
TO SYSTEM CONTROL P406-5
R21
P545
Q4
Q5
C18

SYSTEM CONTROL SUB (1) P.C.B. (VEP86083A) (PART OF VEP86082A) (FOR AU-520/S)
SYSTEM CONTROL SUB (1) P.C.B. (VEP86083C) (PART OF VEP86082C) (FOR AU-505)

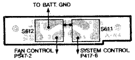


REF. NO. 6000 SERIES

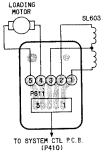
HOUR METER P.C.B. (VEP80199A)
(FOR AU-520/S ONLY)


P714
HOUR METER
TO SYSTEM CONTROL P415-1,2

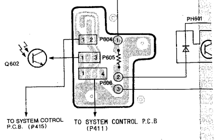
SW INTERMEDIATE P.C.B.
(VEP80514B) (FOR AU-520/S ONLY)

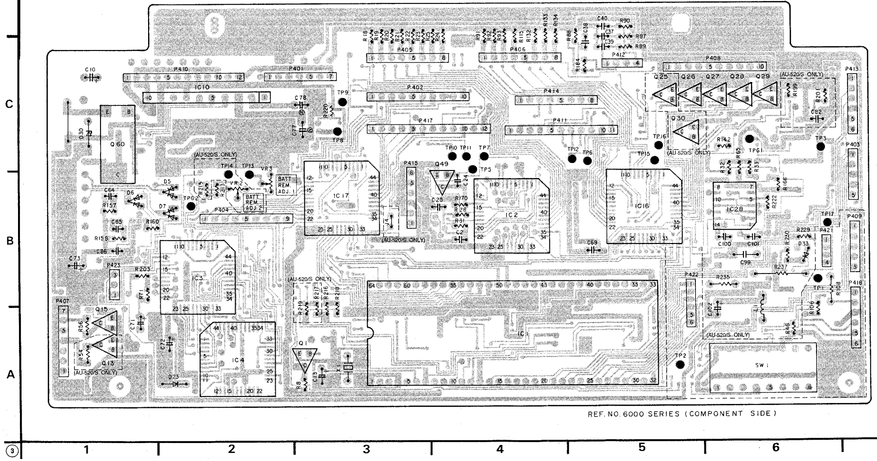

TO BATT. GND
S612
S611
FAN CONTROL P547-2
SYSTEM CONTROL P417-6

MECHANICAL INTERMEDIATE 3 P.C.B.
(VEP80141A)

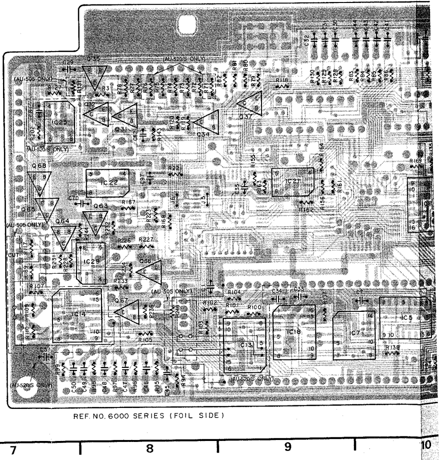

LOADING MOTOR
SL603
P611
TO SYSTEM CTL P.C.B. (P410)

MECHANICAL INTERMEDIATE 2 P.C.B.
(VEP80140B)


PH601
P604
P605
P606
Q602
TO SYSTEM COTROL P.C.B. (P415)
TO SYSTEM CONTROL P.C.B (P411)


F
E
D
C
B
A
1
2
3
4
5
6
(AU-520/S ONLY)
BATT. REM. ADJ. 1
BATT. REM. ADJ. 2
SW 1

REF. NO. 6000 SERIES (COMPONENT SIDE)


(AU-505 ONLY)
(AU-520/S ONLY)
7
8
9
10

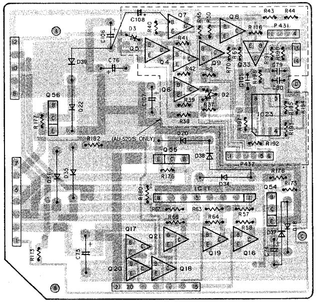
REF. NO. 6000 SERIES (FOIL SIDE)

R AU-520/S)
R AU-505)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

Effective from
Serial No. H9TNA0128 (FOR AU-505)

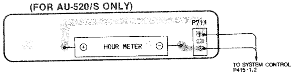
SYSTEM CONTROL SUB (1) P.C.B. (VEP86083A) (PART OF VEP86082A) (FOR AU-520/S)
SYSTEM CONTROL SUB (1) P.C.B. (VEP86083C) (PART OF VEP86082C) (FOR AU-505)



Q7
Q8
Q5
Q4
Q9
Q33
Q6
IC23
Q56
Q55
IC11
Q54
Q17
Q21
Q19
Q16
Q20
Q18
P431
P432
(AU-520/S ONLY)

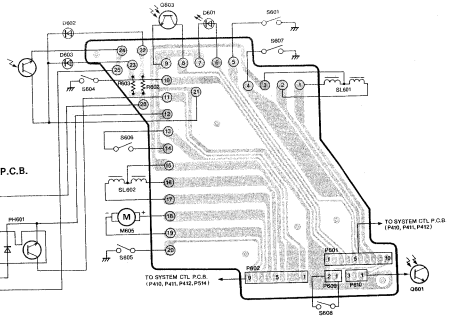
REF. NO. 6000 SERIES

HOUR METER P.C.B. (VEP80199A)
(FOR AU-520/S ONLY)



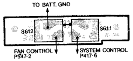
P714
HOUR METER
TO SYSTEM CONTROL P415-1,2

MECHANICAL INTERMEDIATE 1 P.C.B.
(VEP80139B)



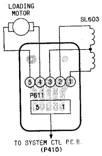
Q603
D601
S601
S607
D602
D603
S604
R603
R602
SL601
S606
SL602
M605
S605
PH601
TO SYSTEM CTL P.C.B. (P410, P411, P412)
P601
P602
TO SYSTEM CTL P.C.B. (P410, P411, P412, P514)
P609
P610
Q601
S608

SW INTERMEDIATE P.C.B.
(VEP80514B) (FOR AU-520/S ONLY)



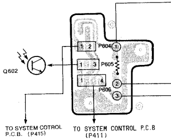
TO BATT. GND
S612
S611
FAN CONTROL P547-2
SYSTEM CONTROL P417-6

MECHANICAL
INTERMEDIATE 3 P.C.B.
(VEP80141A)

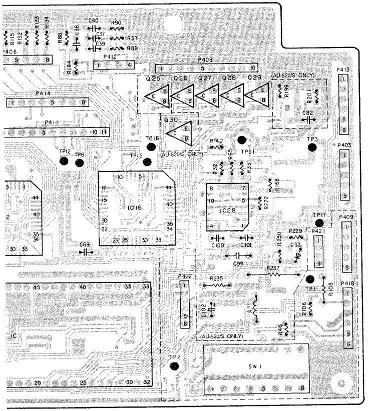


LOADING MOTOR
SL603
P611
TO SYSTEM CTL P.C.B. (P410)

MECHANICAL INTERMEDIATE 2 P.C.B.
(VEP80140B)

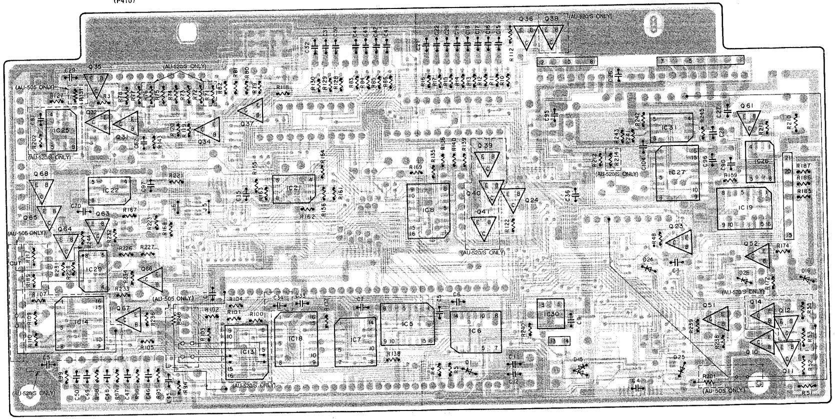


Q602
P604
P605
P606
TO SYSTEM COTROL P.C.B. (P415)
TO SYSTEM CONTROL P.C.B (P411)



P412
P408
P414
P411
Q25
Q26
Q27
Q28
Q29
(AU-520/S ONLY)
Q30
TP16
TP15
TP12
TP6
TP61
TP3
IC16
IC28
TP17
P421
P422
TP1
TP2
SW1
P413
P403
P409
P418

REF. NO. 6000 SERIES (COMPONENT SIDE)



Q36
Q38
(AU-520/S ONLY)
(AU-505 ONLY)
Q35
IC25
Q32
Q31
Q34
Q37
Q68
IC22
Q63
Q65
Q64
IC29
Q66
Q67
IC14
IC13
IC18
IC7
IC5
IC6
IC30
IC21
IC8
Q39
Q40
Q41
Q24
IC31
IC27
IC26
IC19
Q61
Q23
Q52
Q51
Q14
Q12
Q10
Q11
Q25
D45

REF. NO. 6000 SERIES (FOIL SIDE)

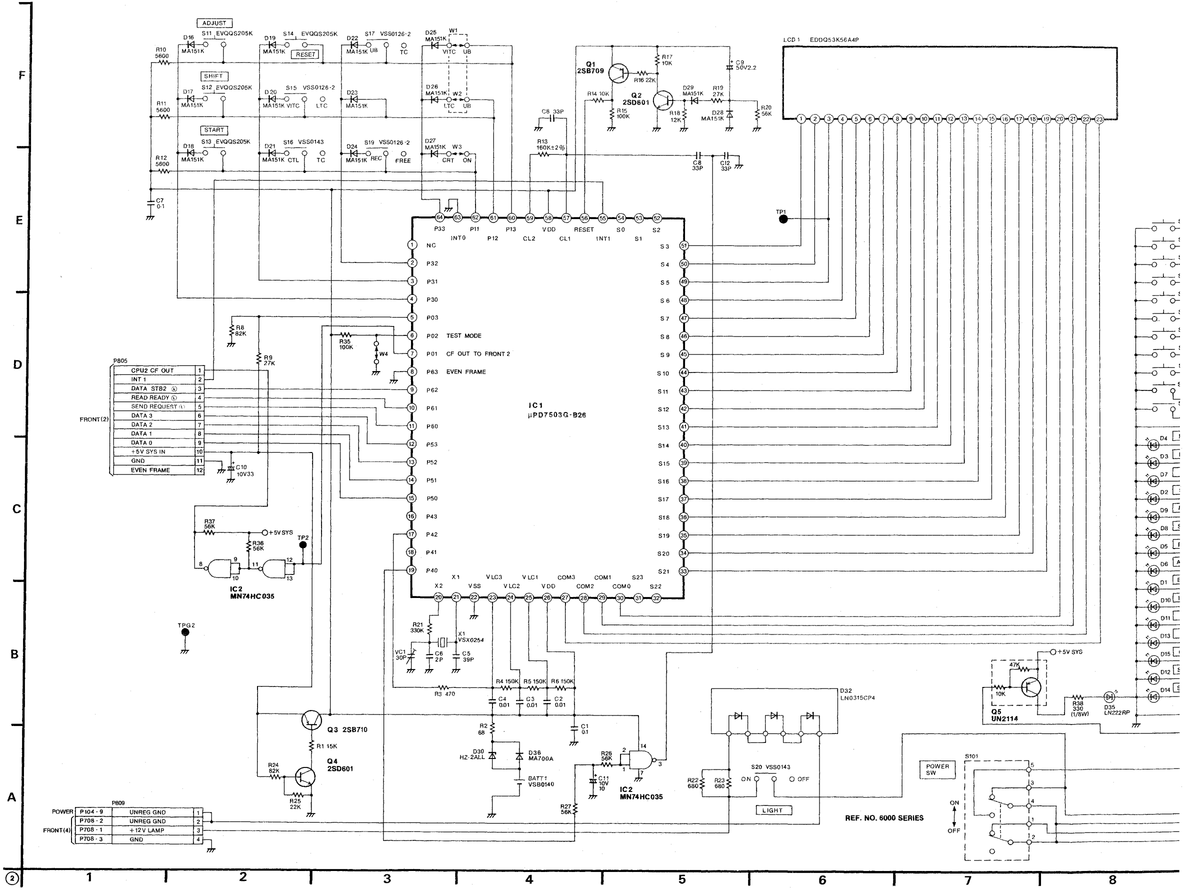
5 6 7 8 9 10 11 12 13

REVERSE SIDE

**FRONT 1
SCHEMATIC DIAGRAM**

FRONT 1 SCHEMATIC DIAGRAM (FOR AU-520/S)

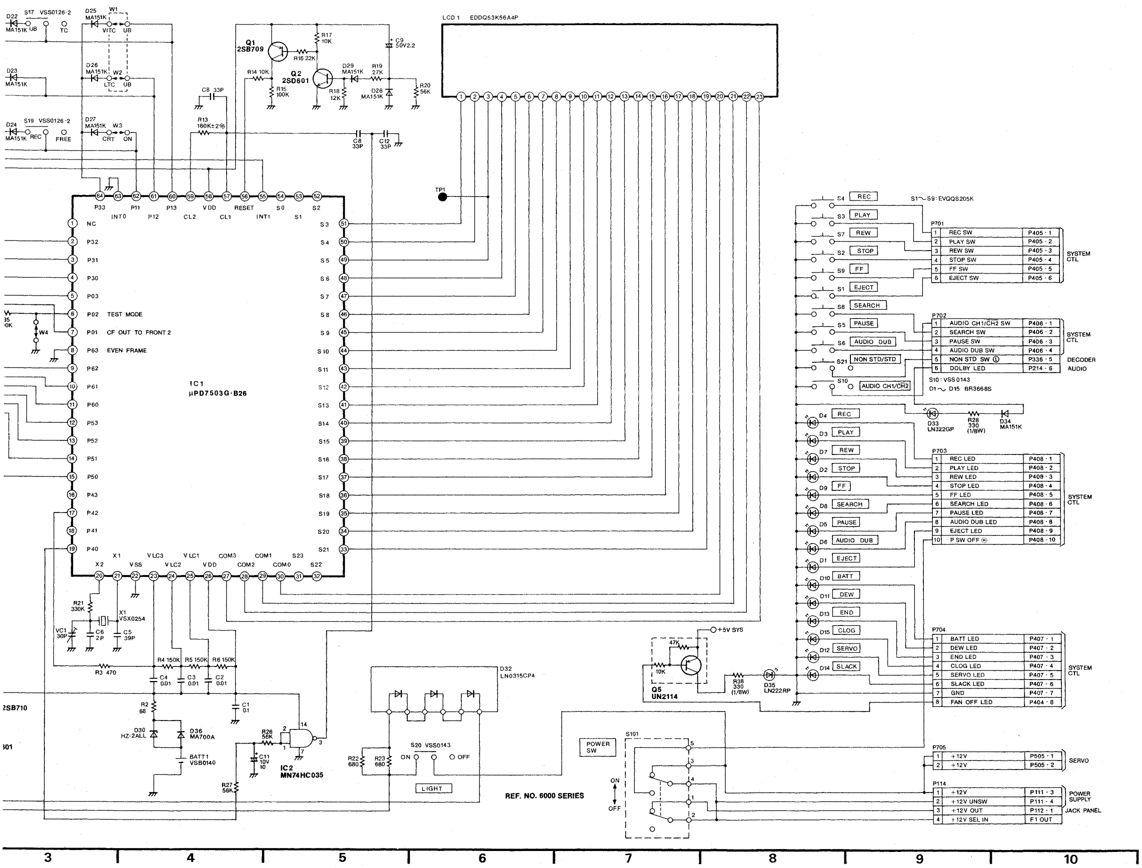
NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


ADJUST
SHIFT
START
RESET
S11 EVQQS205K
S12 EVQQS205K
S13 EVQQS205K
S14 EVQQS205K
S15 VSS0126-2
S16 VSS0143
S17 VSS0126-2
S19 VSS0126-2
D16 MA151K
D17 MA151K
D18 MA151K
D19 MA151K
D20 MA151K
D21 MA151K
D22 MA151K
D23 MA151K
D24 MA151K
D25 MA151K
D26 MA151K
D27 MA151K
R10 5600
R11 5600
R12 5600
C7 0.1
VITC
LTC
CTL
TC
UB
REC
FREE
CRT
ON
W1
W2
W3
Q1 2SB709
Q2 2SD601
R17 10K
R16 22K
R14 10K
R15 100K
R18 12K
D29 MA151K
R19 27K
D28 MA151K
R20 56K
C9 50V2.2
C8 33P
R13 160K±2%
C8 33P
C12 33P
LCD 1 EDDQ53K56A4P
TP1
P33
INT0
P11
P12
P13
CL2
VDD
CL1
RESET
INT1
S0
S1
S2
NC
P32
P31
P30
P03
P02 TEST MODE
P01 CF OUT TO FRONT 2
P63 EVEN FRAME
P62
P61
P60
P53
P52
P51
P50
P43
P42
P41
P40
IC1
μPD7503G-B26
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
X1
X2
VSS
VLC3
VLC2
VLC1
VDD
COM3
COM2
COM1
COM0
S23
S22
R8 82K
R9 27K
R35 100K
W4
P805
FRONT(2)
CPU2 CF OUT
INT 1
DATA STB2
READ READY
SEND REQUEST
DATA 3
DATA 2
DATA 1
DATA 0
+5V SYS IN
GND
EVEN FRAME
C10 10V33
R37 56K
R36 56K
+5V SYS
TP2
IC2 MN74HC035
TPG2
R21 330K
X1 VSX0254
VC1 30P
C6 2P
C5 39P
R3 470
R4 150K
R5 150K
R6 150K
C4 0.01
C3 0.01
C2 0.01
C1 0.1
R2 68
D30 HZ-2ALL
D36 MA700A
BATT1 VSB0140
Q3 2SB710
R1 15K
Q4 2SD601
R24 82K
R25 22K
R26 56K
C11 10V 10
R27 56K
IC2 MN74HC035
D32 LN0315CP4
R22 680
R23 680
S20 VSS0143
ON
OFF
LIGHT
POWER SW
S101
REF. NO. 6000 SERIES
Q5 UN2114
47K
10K
R38 330 (1/8W)
D35 LN222RP
+5V SYS
D4
D3
D7
D2
D9
D8
D5
D6
D1
D10
D11
D13
D15
D12
D14
P809
POWER
FRONT(4)
P104-9
P708-2
P708-1
P708-3
UNREG GND
UNREG GND
+12V LAMP
GND
F
E
D
C
B
A
2
1
2
3
4
5
6
7
8

l (FOR AU-520/S)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

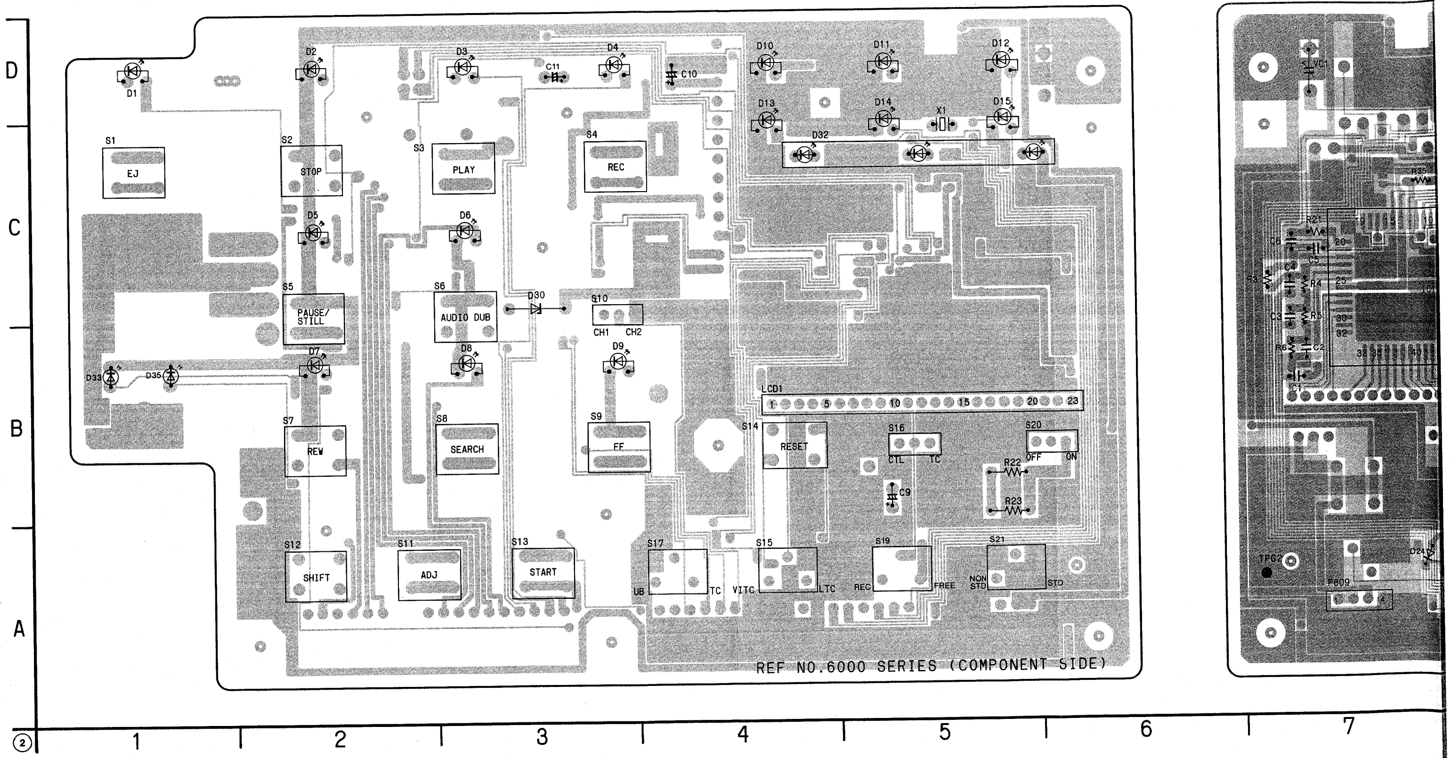
Effective from
Serial No. H9TNA0128 (FOR AU-505)

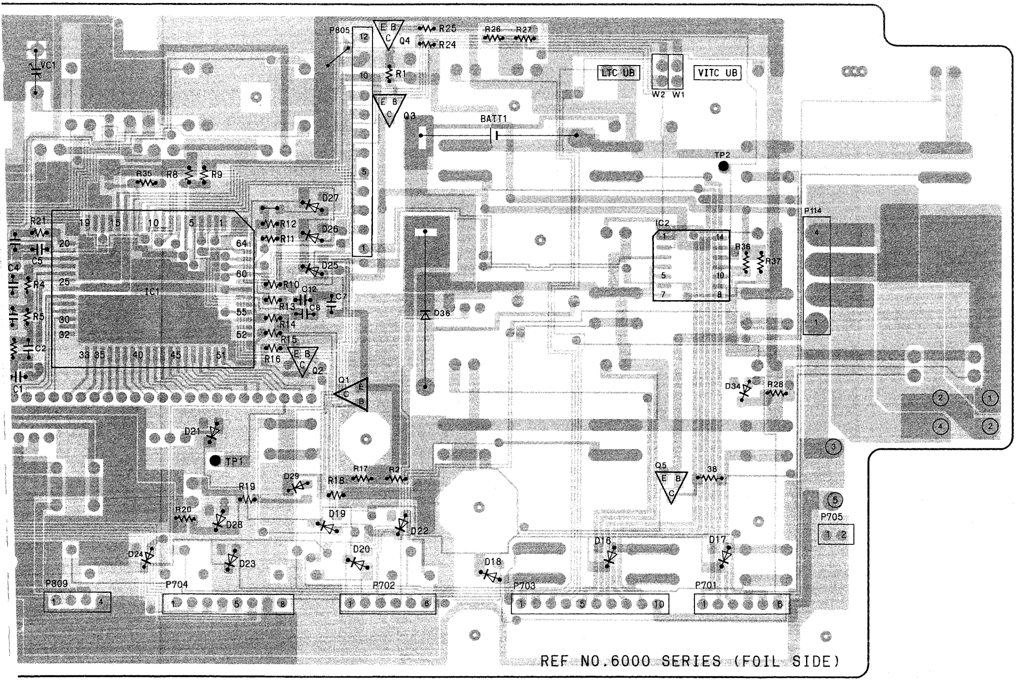


LCD 1 EDDQ53K56A4P
IC1 µPD7503G-B26
IC2 MN74HC035
Q1 2SB709
Q2 2SD601
Q5 UN2114
TP1
S17 VSS0126-2
S19 VSS0126-2
D22 MA151K
D23 MA151K
D24 MA151K
D25 MA151K
D26 MA151K
D27 MA151K
W1 VITC UB
W2 LTC UB
W3 CRT ON
UB TC
REC FREE
R13 160K±2%
R14 10K
R15 100K
R16 22K
R17 10K
R18 12K
R19 27K
R20 56K
C8 33P
C9 50V2.2
C12 33P
D28 MA151K
D29 MA151K
P33 INT0 P11 P12 P13 CL2 VDD CL1 RESET INT1 S0 S1 S2
NC P32 P31 P30 P03 P02 TEST MODE P01 CF OUT TO FRONT 2 P63 EVEN FRAME P62 P61 P60 P53 P52 P51 P50 P43 P42 P41 P40
S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21
X1 X2 VSS VLC3 VLC2 VLC1 VDD COM3 COM2 COM1 COM0 S23 S22
W4
R21 330K
X1 VSX0254
VC1 30P
C6 2P
C5 39P
R3 470
R4 150K R5 150K R6 150K
C4 0.01 C3 0.01 C2 0.01
C1 0.1
R2 68
D30 HZ-2ALL
D36 MA700A
BATT1 VSB0140
R26 56K
R27 56K
C11 10V 10
2SB710
D32 LN0315CP4
S20 VSS0143
ON OFF
R22 680 R23 680
LIGHT
REF. NO. 6000 SERIES
+5V SYS
47K
10K
R38 330 (1/8W)
D35 LN222RP
POWER SW
S101
ON OFF
S1～S9: EVQQS205K
S4 REC
S3 PLAY
S7 REW
S2 STOP
S9 FF
S1 EJECT
S8 SEARCH
S5 PAUSE
S6 AUDIO DUB
S21 NON STD/STD
S10 AUDIO CH1/CH2
S10: VSS0143
D1～D15 BR3668S
D33 LN322GP
R28 330 (1/8W)
D34 MA151K
D4 REC
D3 PLAY
D7 REW
D2 STOP
D9 FF
D8 SEARCH
D5 PAUSE
D6 AUDIO DUB
D1 EJECT
D10 BATT
D11 DEW
D13 END
D15 CLOG
D12 SERVO
D14 SLACK
P701
1 REC SW P405-1
2 PLAY SW P405-2
3 REW SW P405-3
4 STOP SW P405-4
5 FF SW P405-5
6 EJECT SW P405-6
SYSTEM CTL
P702
1 AUDIO CH1/CH2 SW P406-1
2 SEARCH SW P406-2
3 PAUSE SW P406-3
4 AUDIO DUB SW P406-4
5 NON STD SW Ⓛ P336-5
6 DOLBY LED P214-6
SYSTEM CTL
DECODER
AUDIO
P703
1 REC LED P408-1
2 PLAY LED P408-2
3 REW LED P408-3
4 STOP LED P408-4
5 FF LED P408-5
6 SEARCH LED P408-6
7 PAUSE LED P408-7
8 AUDIO DUB LED P408-8
9 EJECT LED P408-9
10 P SW OFF Ⓗ P408-10
SYSTEM CTL
P704
1 BATT LED P407-1
2 DEW LED P407-2
3 END LED P407-3
4 CLOG LED P407-4
5 SERVO LED P407-5
6 SLACK LED P407-6
7 GND P407-7
8 FAN OFF LED P404-8
SYSTEM CTL
P705
1 +12V P505-1
2 +12V P505-2
SERVO
P114
1 +12V P111-3
2 +12V UNSW P111-4
3 +12V OUT P112-1
4 +12V SEL IN F1 OUT
POWER SUPPLY
JACK PANEL
3 4 5 6 7 8 9 10

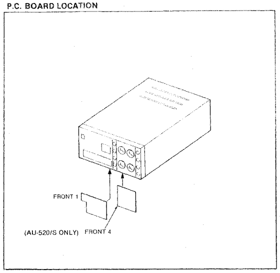
FRONT 1 P.C. BOARD (VEP86074A) (FOR AU-520/S)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


D
C
B
A
1
2
3
4
5
6
7
②
D1
D2
D3
D4
C11
C10
D10
D11
D12
D13
D14
X1
D15
D32
S1
EJ
S2
STOP
S3
PLAY
S4
REC
D5
D6
S5
PAUSE/ STILL
S6
AUDIO DUB
D30
S10
CH1
CH2
D7
D8
D9
D33
D35
LCD1
1
5
10
15
20
23
S7
REW
S8
SEARCH
S9
FF
S14
RESET
S16
CTL
TC
S20
OFF
ON
R22
C9
R23
S12
SHIFT
S11
ADJ
S13
START
S17
UB
TC
VITC
S15
LTC
REC
S19
FREE
S21
NON STD
STD
REF NO.6000 SERIES (COMPONENT SIDE)
VC1
R35
R21
C6
C5
C4
R3
R4
C3
R5
R6
C2
C1
TPG2
D24
P809


P805
E B C Q4
R25
R24
R26
R27
R1
E B C Q3
BATT1
LTC UB
VITC UB
W2 W1
TP2
VC1
R35 R8 R9
D27
D26
D25
R21
C5
C4
R4
R5
C2
C1
IC1
R12
R11
R10
C12
C7
C8
R13
R14
R15
R16
E B C Q2
Q1 C E B
D36
IC2
R36
R37
P114
D34
R28
D21
TP1
D29
R17
R2
R18
R19
R20
D28
D19
D22
D20
D24
D23
Q5 E B C
38
P705
D18
D16
D17
P809
P704
P702
P703
P701
REF NO.6000 SERIES (FOIL SIDE)

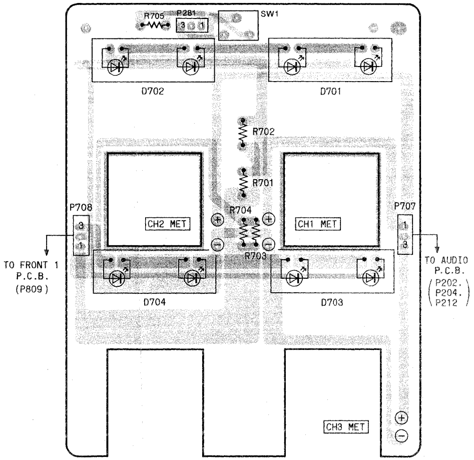
P.C. BOARD LOCATION


FRONT 1
(AU-520/S ONLY) FRONT 4

FRONT 1 P.C.B.	
Transistor	
Q6001	B-8
Q6002	B-6
Q6003	D-9
Q6004	D-9
Q6005	B-10
Integrated Circuit	
IC6001	C-7
IC6002	C-10
Test Point	
TP6001	B-8
TP6002	C-10
TPG6002	A-7

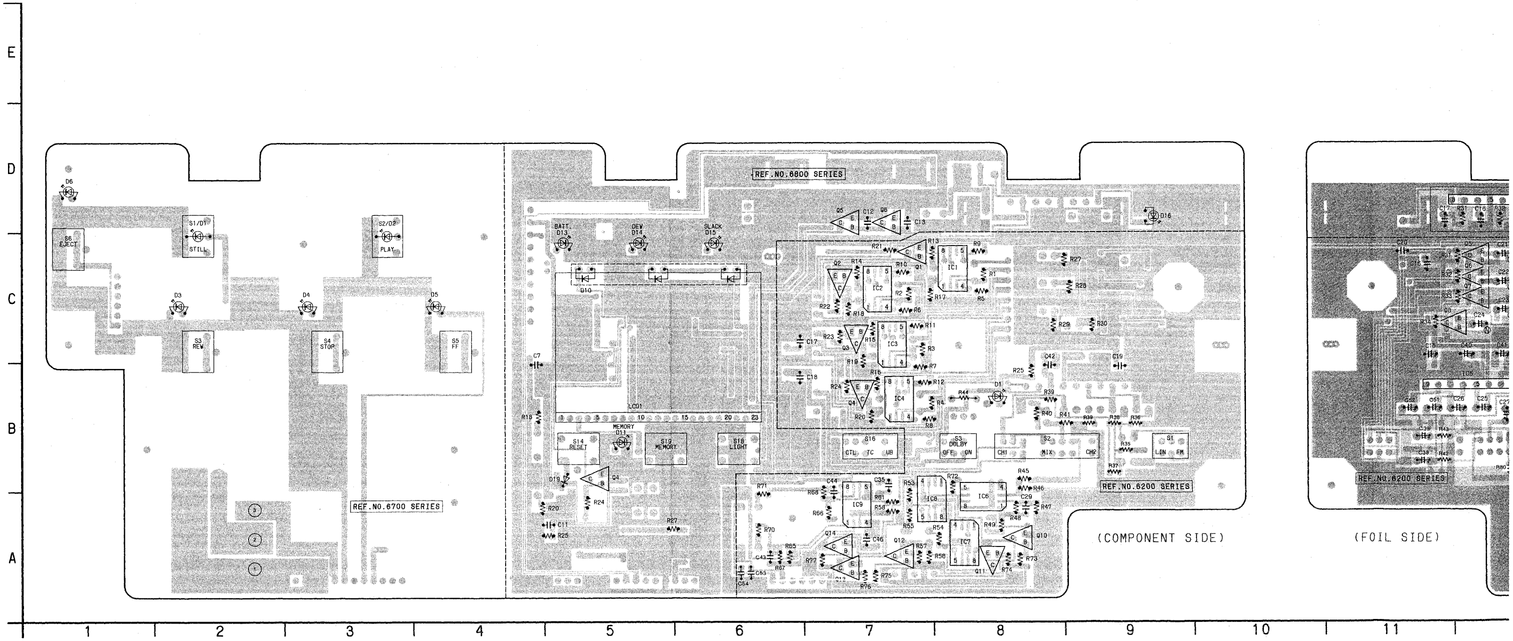
ADDRESS INFORMATION

FRONT 4 P.C.B. (VEP80541A)(FOR AU-520/S ONLY)


R705
P281
SW1
D702
D701
R702
R701
R704
R703
P708
P707
CH2 MET
CH1 MET
CH3 MET
D704
D703
TO FRONT 1 P.C.B. (P809)
TO AUDIO P.C.B. (P202, P204, P212)

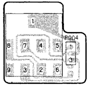
7 8 9 10 11 12 13 14

FRONT 1 P.C. BOARD (VEP86044A) (FOR AU-505)

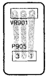

E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
D6
S6 EJECT
S1/D1 STILL
S2/D2 PLAY
D3
D4
D5
S3 REW
S4 STOP
S5 FF
REF.NO.6700 SERIES
REF.NO.6800 SERIES
BATT. D13
DEW D14
SLACK D15
D16
LCD1
S14 RESET
MEMORY D11
S19 MEMORY
S18 LIGHT
S16 CTL TC UB
S3 DOLBY OFF ON
S2 CH1 MIX CH2
S1 LIN FM
IC1
IC2
IC3
IC4
IC6
IC7
IC8
IC9
REF.NO.6200 SERIES
(COMPONENT SIDE)
(FOIL SIDE)

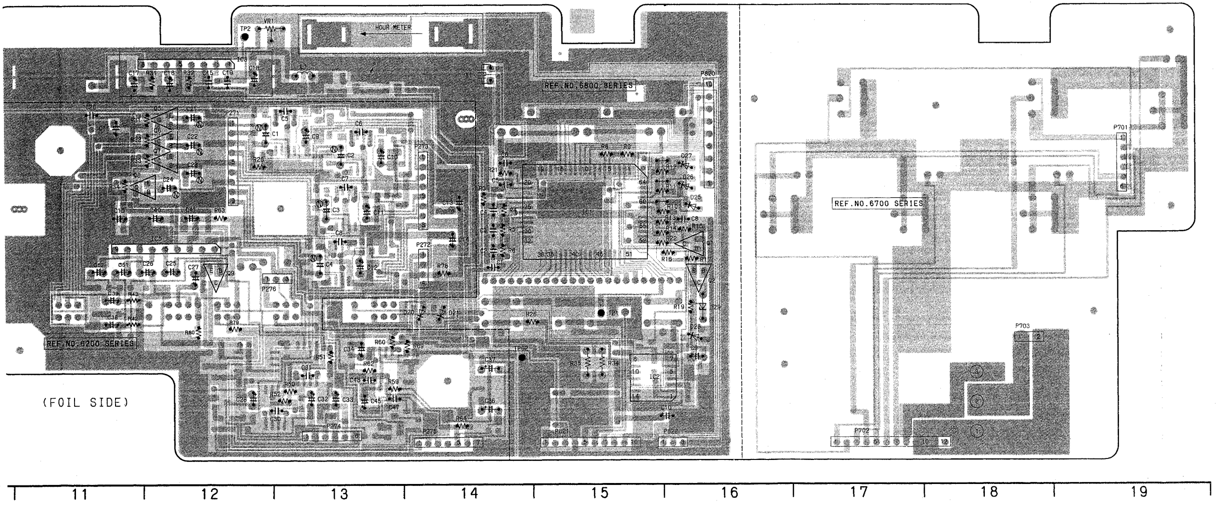
REVERSE SIDE
FRONT 1 P.C.B.

HEADPHONE JACK P.C.B.
(VEP80302A)(FOR AU-505)


P904
1
2
3
4
5
6
7
8
9

HEADPHONE VR P.C.B.
(VEP80303A) (FOR AU-505 ONLY)

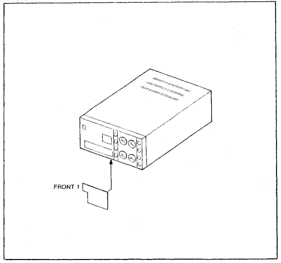

VR901
P905
3
1


TP2
VR1
IC3
HOUR METER
REF.NO.6800 SERIES
P820
REF.NO.6700 SERIES
P701
P703
P702
REF.NO.6200 SERIES
P271
P272
P273
P274
P275
P276
P821
P822
TP1
TPG2
IC2
(FOIL SIDE)
11
12
13
14
15
16
17
18
19

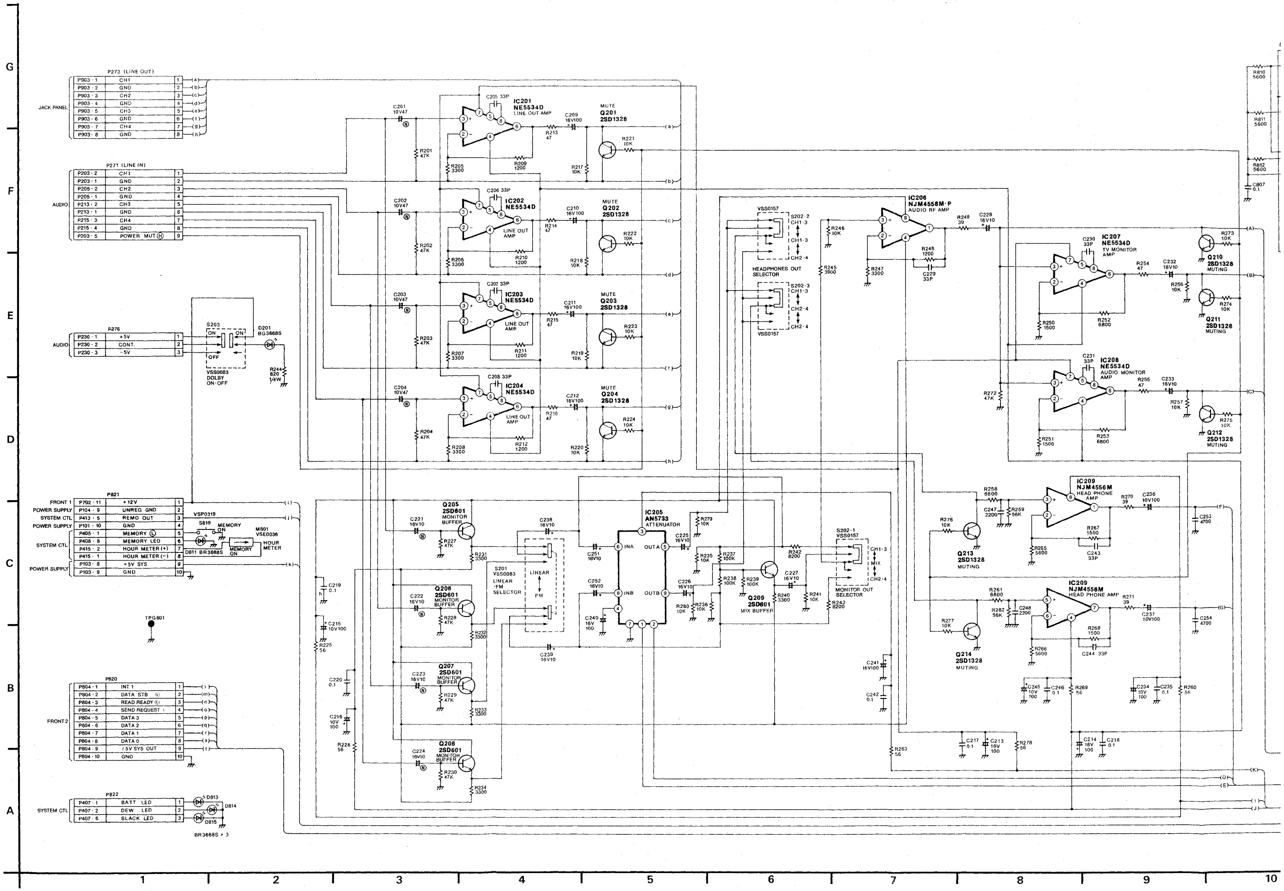
FRONT 1 P.C.B.	
Transistors	
Q6201	C-7
Q6202	C-7
Q6203	C-7
Q6204	B-7
Q6205	C-12
Q6206	C-12
Q6207	C-12
Q6208	C-12
Q6209	B-12
Q6210	A-8
Q6211	A-8
Q6212	A-7
Q6213	A-7
Q6214	A-7
Q6801	B-16
Q6802	B-16
Q6804	B-5
Q6805	D-7
Q6806	D-7
Integrated Circuits	
IC6201	C-8
IC6202	C-7
IC6203	C-7
IC6204	B-7
IC6205	B-12
IC6206	A-8
IC6207	A-8
IC6208	A-8
IC6209	A-7
IC6801	C-15
IC6802	A-15
IC6803	D-12
Test Points	
TP6801	B-15
TP6802	D-12
TPG2	A-14
Adjustments	
VR6801	D-13

ADDRESS INFORMATION

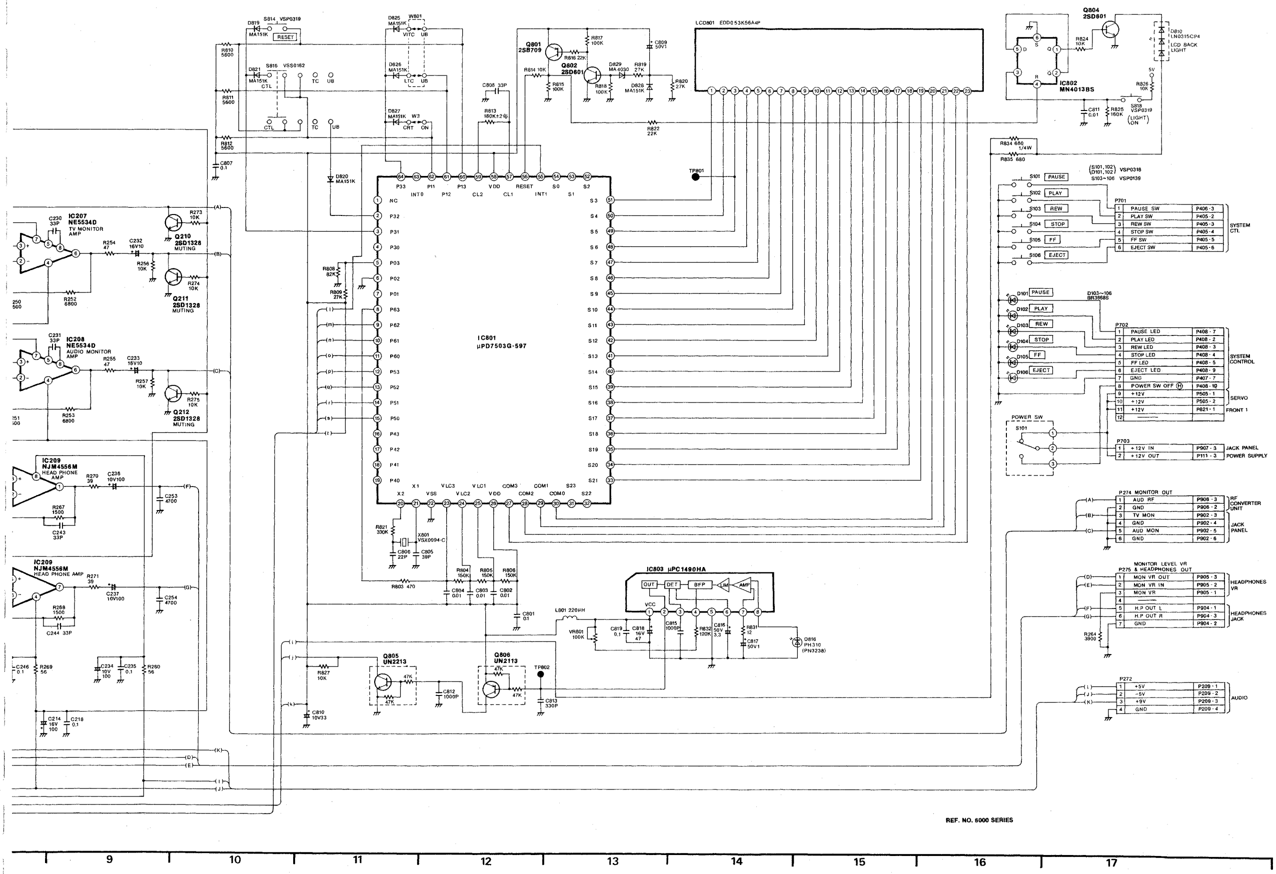
P.C. BOARD LOCATION



FRONT 1 SCHEMATIC DIAGRAM (FOR AU-505)



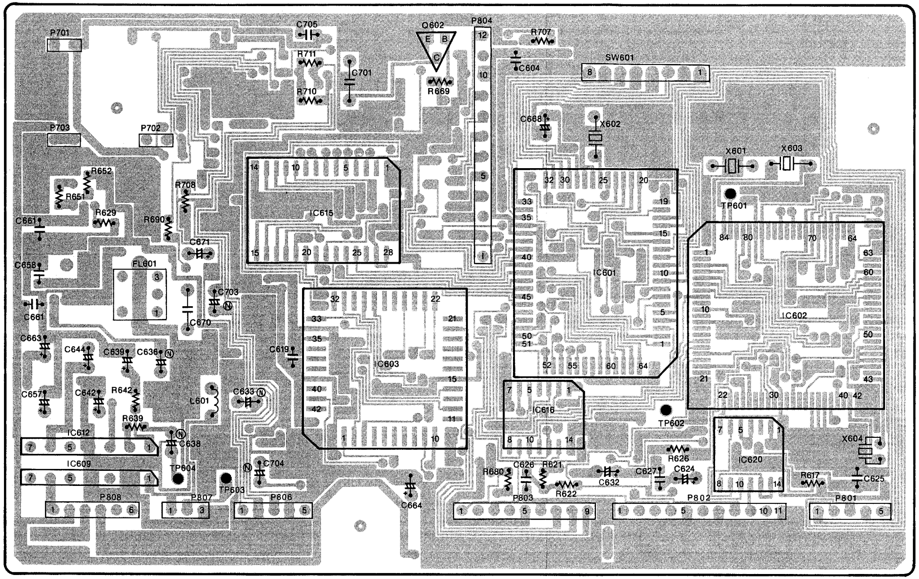
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
P273 (LINE OUT)
JACK PANEL
P903 · 1 CH1
P903 · 2 GND
P903 · 3 CH2
P903 · 4 GND
P903 · 5 CH3
P903 · 6 GND
P903 · 7 CH4
P903 · 8 GND
P271 (LINE IN)
AUDIO
P203 · 2 CH1
P203 · 1 GND
P205 · 2 CH2
P205 · 1 GND
P213 · 2 CH3
P213 · 1 GND
P215 · 3 CH4
P215 · 4 GND
P203 · 5 POWER MUT
R276
AUDIO
P230 · 1 +5V
P230 · 2 CONT.
P230 · 3 −5V
S203
ON
OFF
VSS0083 DOLBY ON·OFF
D201 BG3668S
R244 820 1/4W
P821
FRONT 1 POWER SUPPLY
SYSTEM CTL
POWER SUPPLY
SYSTEM CTL
POWER SUPPLY
P702 · 11 +12V
P104 · 9 UNREG GND
P413 · 5 REMO OUT
P101 · 10 GND
P405 · 1 MEMORY
P408 · 8 MEMORY LED
P415 · 2 HOUR METER (+)
P415 · 1 HOUR METER (−)
P103 · 8 +5V SYS
P103 · 9 GND
VSP0319
S819 MEMORY ON
M801 VSE0036 HOUR METER
D811 BR3668S
TPG801
P820
FRONT 2
P804 · 1 INT 1
P804 · 2 DATA STB
P804 · 3 READ READY
P804 · 4 SEND REQUEST
P804 · 5 DATA 3
P804 · 6 DATA 2
P804 · 7 DATA 1
P804 · 8 DATA 0
P804 · 9 +5V SYS OUT
P804 · 10 GND
P822
SYSTEM CTL
P407 · 1 BATT LED
P407 · 2 DEW LED
P407 · 6 SLACK LED
D813
D814
D815
BR3668S × 3
IC201 NE5534D LINE OUT AMP
IC202 NE5534D LINE OUT AMP
IC203 NE5534D LINE OUT AMP
IC204 NE5534D LINE OUT AMP
C201 10V47
C202 10V47
C203 10V47
C204 10V47
C205 33P
C206 33P
C207 33P
C208 33P
R201 47K
R202 47K
R203 47K
R204 47K
R205 3300
R206 3300
R207 3300
R208 3300
R209 1200
R210 1200
R211 1200
R212 1200
R213 47
R214 47
R215 47
R216 47
C209 16V100
C210 16V100
C211 16V100
C212 16V100
MUTE Q201 2SD1328
MUTE Q202 2SD1328
MUTE Q203 2SD1328
MUTE Q204 2SD1328
R217 10K
R218 10K
R219 10K
R220 10K
R221 10K
R222 10K
R223 10K
R224 10K
Q205 2SD601 MONITOR BUFFER
Q206 2SD601 MONITOR BUFFER
Q207 2SD601 MONITOR BUFFER
Q208 2SD601 MONITOR BUFFER
C221 16V10
C222 16V10
C223 16V10
C224 16V10
R227 47K
R228 47K
R229 47K
R230 47K
R231 3300
R232 3300
R233 3300
R234 3300
C219 0.1
C215 10V100
R225 56
C220 0.1
C216 10V 100
R226 56
C238 16V10
C239 16V10
S201 VSS0083 LINEAR ·FM SELECTOR
LINEAR
FM
IC205 AN5733 ATTENUATOR
INA
OUTA
INB
OUTB
C251 16V10
C252 16V10
C240 16V 100
C225 16V10
C226 16V10
R279 10K
R235 10K
R237 100K
R238 100K
R239 100K
R280 10K
R236 10K
Q209 2SD601 MIX BUFFER
R240 3300
R242 8200
C227 16V10
R241 10K
R243 8200
S202-1 VSS0157 MONITOR OUT SELECTOR
CH1·3
MIX
CH2·4
VSS0157
S202·2
CH1·3
CH1·3
CH2·4
HEADPHONES OUT SELECTOR
S202·3
CH1·3
CH2·4
CH2·4
VSS0157
R246 10K
R245 3900
R247 3300
IC206 NJM4558M·P AUDIO RF AMP
R248 1200
C229 33P
R249 39
C228 16V10
C241 16V100
C242 0.1
IC207 NE5534D TV MONITOR AMP
C230 33P
R254 47
C232 16V10
R256 10K
R250 1500
R252 6800
Q210 2SD1328 MUTING
R273 10K
Q211 2SD1328 MUTING
R274 10K
IC208 NE5534D AUDIO MONITOR AMP
C231 33P
R255 47
C233 16V10
R257 10K
R272 47K
R251 1500
R253 6800
Q212 2SD1328 MUTING
R275 10K
IC209 NJM4556M HEAD PHONE AMP
R258 6800
C247 2200
R259 56K
R270 39
C236 10V100
C253 4700
R276 10K
Q213 2SD1328 MUTING
R265 5600
R267 1500
C243 33P
IC209 NJM4556M HEAD PHONE AMP
R261 6800
R262 56K
C248 2200
R271 39
C237 10V100
C254 4700
R277 10K
Q214 2SD1328 MUTING
R266 5600
R268 1500
C244 33P
C245 10V 100
C246 0.1
R269 56
C234 10V 100
C235 0.1
R260 56
R263 56
C217 0.1
C213 16V 100
R278 56
C214 16V 100
C218 0.1
R810 5600
R811 5600
R812 5600
C807 0.1


D819 MA151K
S814 VSP0319
RESET
R810 5600
D821 MA151K
S816 VSS0162
CTL
TC
UB
R811 5600
R812 5600
C807 0.1
D820 MA151K
D825 MA151K
W801
VITC
UB
D826 MA151K
LTC
D827 MA151K
W3
CRT
ON
C808 33P
R813 180K±2%
Q801 2SB709
Q802 2SD601
R817 100K
R816 22K
R814 10K
R815 100K
R818 100K
D829 MA4030
R819 27K
D828 MA151K
C809 50V1
R820 27K
R822 22K
LCD801 EDD053K56A4P
TP801
Q804 2SD601
R824 10K
IC802 MN4013BS
D
S
Q
R
D810 LN0315CP4
LCD BACK LIGHT
5V
R826 10K
C811 0.01
R825 160K
S818 VSP0319
(LIGHT ON)
R834 680 1/4W
R835 680
IC801 µPD7503G-597
NC
P32
P31
P30
P03
P02
P01
P63
P62
P61
P60
P53
P52
P51
P50
P43
P42
P41
P40
P33
INT0
P11
P12
P13
CL2
VDD
CL1
RESET
INT1
S0
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
X2
X1
VSS
VLC3
VLC2
VLC1
COM3
COM2
COM1
COM0
S23
S22
R808 82K
R809 27K
R821 330K
X801 VSX0094-C
C806 22P
C805 39P
R803 470
R804 150K
R805 150K
R806 150K
C804 0.01
C803 0.01
C802 0.01
C801 0.1
L801 220µH
VR801 100K
IC803 µPC1490HA
OUT
DET
BFP
LIM
AMP
VCC
C819 0.1
C818 16V 47
C815 1000P
R832 120K
C816 50V 3.3
R831 12
C817 50V1
D816 PH310 (PN3238)
Q805 UN2213
Q806 UN2113
47K
R827 10K
C810 10V33
C812 1000P
TP802
C813 330P
IC207 NE5534D
TV MONITOR AMP
C230 33P
R254 47
C232 16V10
R256 10K
R252 6800
R273 10K
Q210 2SD1328
MUTING
R274 10K
Q211 2SD1328
MUTING
IC208 NE5534D
AUDIO MONITOR AMP
C231 33P
R255 47
C233 16V10
R257 10K
R253 6800
R275 10K
Q212 2SD1328
MUTING
IC209 NJM4556M
HEAD PHONE AMP
R270 39
C236 10V100
C253 4700
R267 1500
C243 33P
IC209 NJM4556M
HEAD PHONE AMP
R271 39
C237 10V100
C254 4700
R268 1500
C244 33P
C246 0.1
R269 56
C234 10V 100
C235 0.1
R260 56
C214 16V 100
C218 0.1
(A)
(B)
(C)
(D)
(E)
(F)
(G)
(I)
(J)
(K)
(S101,102 D101,102) VSP0318
S103~106 VSP0139
S101 PAUSE
S102 PLAY
S103 REW
S104 STOP
S105 FF
S106 EJECT
P701
1 PAUSE SW P406-3
2 PLAY SW P405-2
3 REW SW P405-3
4 STOP SW P405-4
5 FF SW P405-5
6 EJECT SW P405-6
SYSTEM CTL
D101 PAUSE
D102 PLAY
D103 REW
D104 STOP
D105 FF
D106 EJECT
D103~106 BR3668S
P702
1 PAUSE LED P408-7
2 PLAY LED P408-2
3 REW LED P408-3
4 STOP LED P408-4
5 FF LED P408-5
6 EJECT LED P408-9
7 GND P407-7
8 POWER SW OFF Ⓗ P408-10
9 +12V P505-1
10 +12V P505-2
11 +12V P821-1
12 ———
SYSTEM CONTROL
SERVO
FRONT 1
POWER SW
S101
P703
1 +12V IN P907-3
2 +12V OUT P111-3
JACK PANEL
POWER SUPPLY
P274 MONITOR OUT
1 AUD RF P906-3
2 GND P906-2
3 TV MON P902-3
4 GND P902-4
5 AUD MON P902-5
6 GND P902-6
RF CONVERTER UNIT
JACK PANEL
P275 MONITOR LEVEL VR & HEADPHONES OUT
1 MON VR OUT P905-3
2 MON VR IN P905-2
3 MON VR P905-1
4 ———
5 H.P OUT L P904-1
6 H.P OUT R P904-3
7 GND P904-2
HEADPHONES VR
HEADPHONES JACK
R264 3900
P272
1 +5V P209-1
2 -5V P209-2
3 +9V P209-3
4 GND P209-4
AUDIO
9
10
11
12
13
14
15
16
17

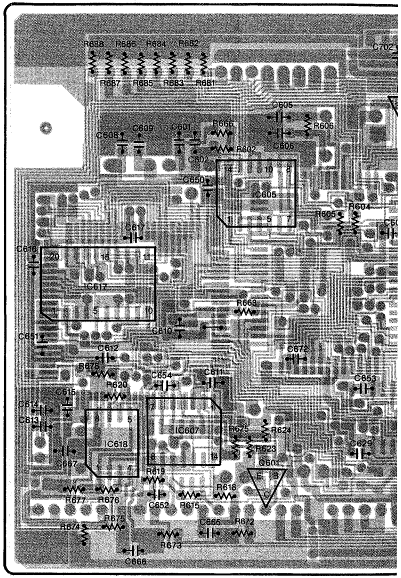
REF. NO. 6000 SERIES

FRONT 2 P.C. BOARD (VEP86077A) (FOR AU-520/S)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


P701
C705
Q602
E
B
C
P804
12
10
5
1
R707
C604
SW601
8
1
R711
C701
R669
R710
P703
P702
R652
R651
R629
R708
R690
C661
C671
IC615
14
10
5
1
15
20
25
28
C658
FL601
3
1
C703
C681
C670
C663
C644
C639
C636
C619
IC603
32
22
33
21
35
15
40
42
11
1
10
C657
C642
R642
L601
C633
R639
IC612
7
5
1
C638
IC609
7
5
1
TP604
TP603
C704
P808
1
6
P807
1
3
P806
1
5
C664
C668
X602
IC601
32
30
25
20
33
19
35
15
40
10
45
5
50
51
1
52
55
60
64
X601
X603
TP601
IC602
84
80
70
64
1
63
60
10
50
21
43
22
30
40
42
IC616
7
5
1
8
10
14
TP602
IC620
7
5
1
8
10
14
X604
R680
C626
R621
R626
C632
C627
C624
R622
R617
C625
P803
1
5
9
P802
1
5
10
11
P801
1
5

REF. NO. 6000 SERIES (COMPONENT SIDE)


R688
R686
R684
R682
R687
R685
R683
R681
C702
C605
R606
C606
R666
C608
C609
C601
R602
C602
C650
IC605
14
10
8
1
5
7
R605
R604
C617
C616
IC617
20
15
11
1
5
10
R663
C610
C651
C612
C672
R678
R620
C654
C611
C653
C615
C614
C613
IC618
8
5
1
4
IC607
7
1
8
14
R625
R624
R623
C629
C667
Q601
E
B
C
R619
R618
R677
R676
C652
R615
R675
C665
R672
R674
R673
C666

(FOIL SIDE) REF. NO. 60

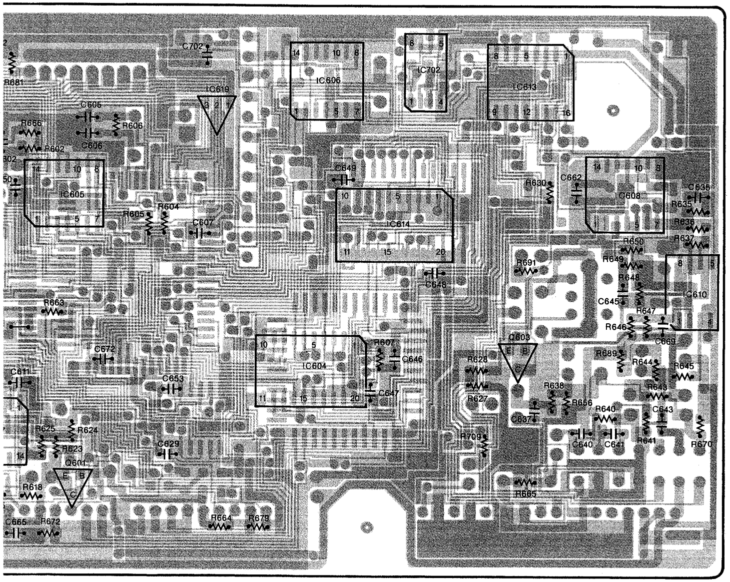
C

B

A

② 1 2 3 4 5 6 7

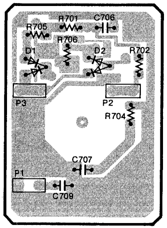
REVERSE
FRONT 1
SCHEMATIC DIAGRAM


R681
C702
IC619
IC606
IC702
IC613
C605
R666
R606
C606
R602
IC605
R605
R604
C607
C649
IC614
R630
C662
IC608
C635
R635
R636
R637
R650
R649
R648
C645
R647
R646
C669
IC610
R691
C648
R663
C672
C611
IC604
R607
C646
C647
C653
Q603
R628
R627
R689
R644
R645
R643
R638
R656
C637
R640
C643
C640
C641
R641
R670
R709
R625
R624
R623
Q601
C629
R618
R685
C665
R672
R664
R679

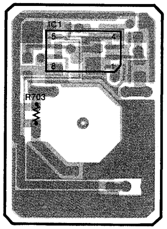
(FOIL SIDE) REF. NO. 6000 SERIES

7 8 9 10 11

FRONT 2 SUB (1) P.C.B.
(VEP80544A) (PART OF VEP86077A)


R705
R701
C706
R706
D1
D2
R702
P3
P2
R704
C707
P1
C709

REF. NO. 6000 SERIES
(COMPONENT SIDE)

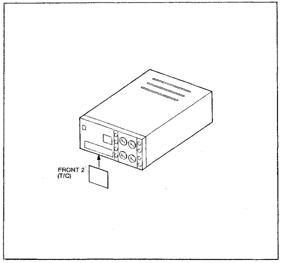


REF. NO. 6000 SERIES
(FOIL SIDE)

FRONT 2 P.C.B.					
Transistors		IC6606	C-8	IC6618	B-6
Q6601	B-7	IC6607	B-7	IC6619	C-8
Q6602	C-3	IC6608	C-10	IC6620	A-5
Q6603	B-9	IC6609	A-2	IC6702	C-9
Integrated Circuits		IC6610	B-10	**Test Points**	
IC6601	B-4	IC6612	B-1	TP6601	C-5
IC6602	B-5	IC6613	C-9	TP6602	B-4
IC6603	B-3	IC6614	C-9	TP6603	A-2
IC6604	B-8	IC6615	C-3	TP6604	A-2
IC6605	C-7	IC6616	B-4		
		IC6617	B-6		

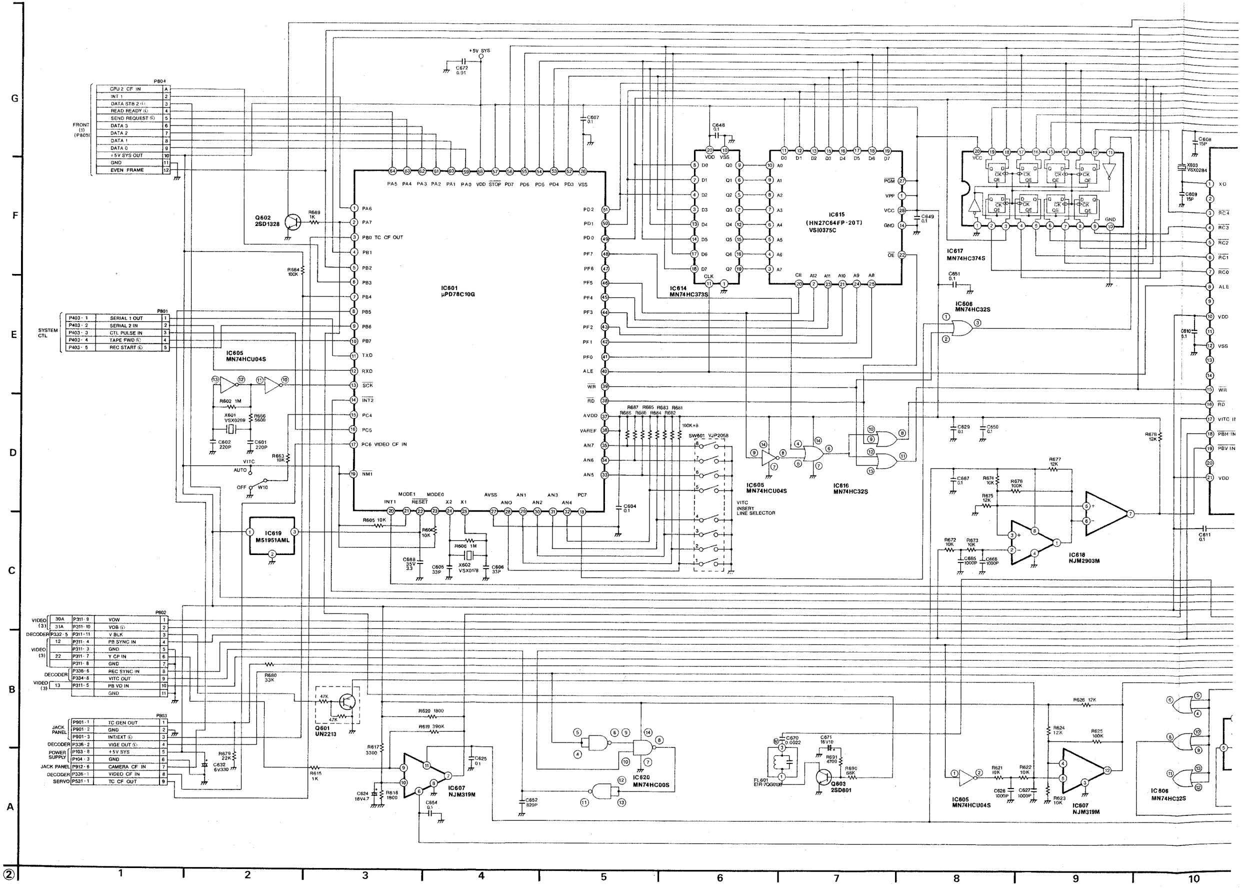
ADDRESS INFORMATION

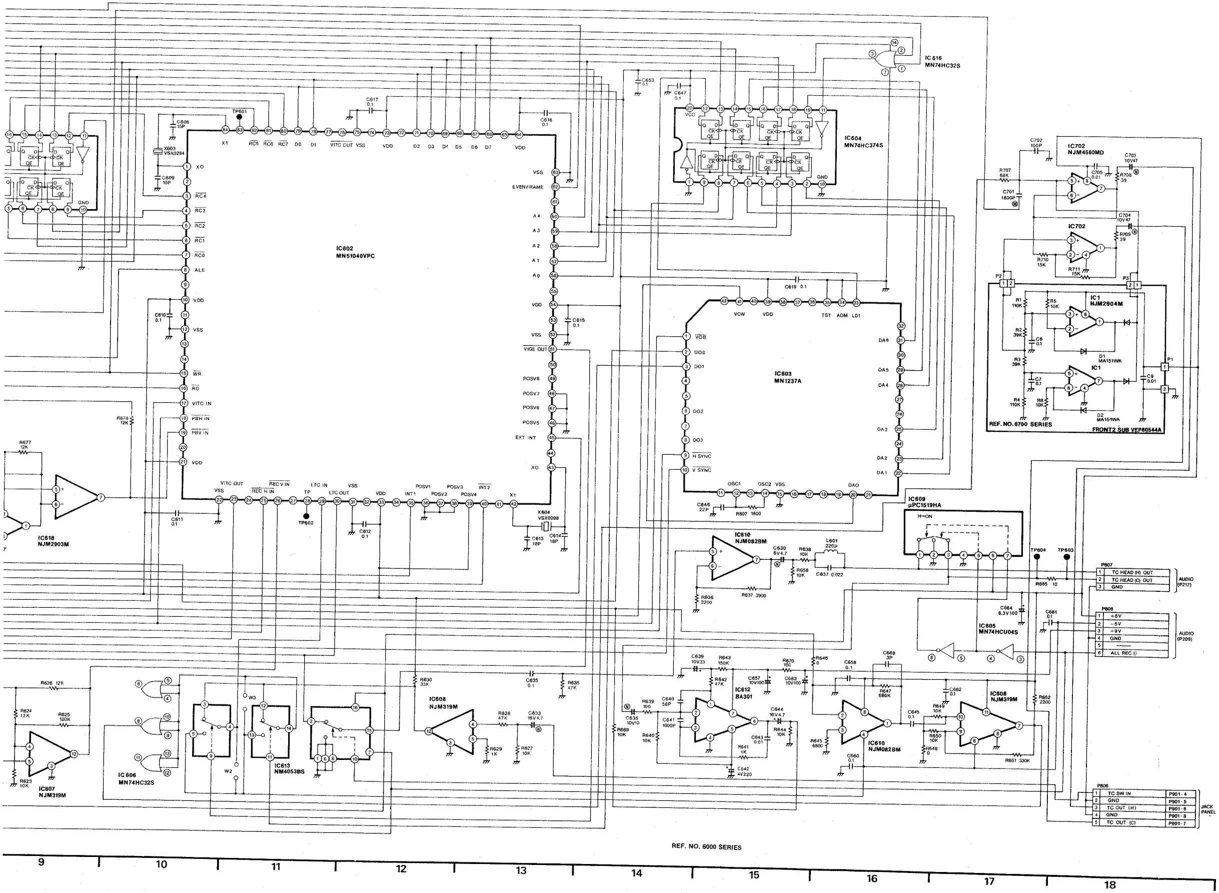
P.C. BOARD LOCATION



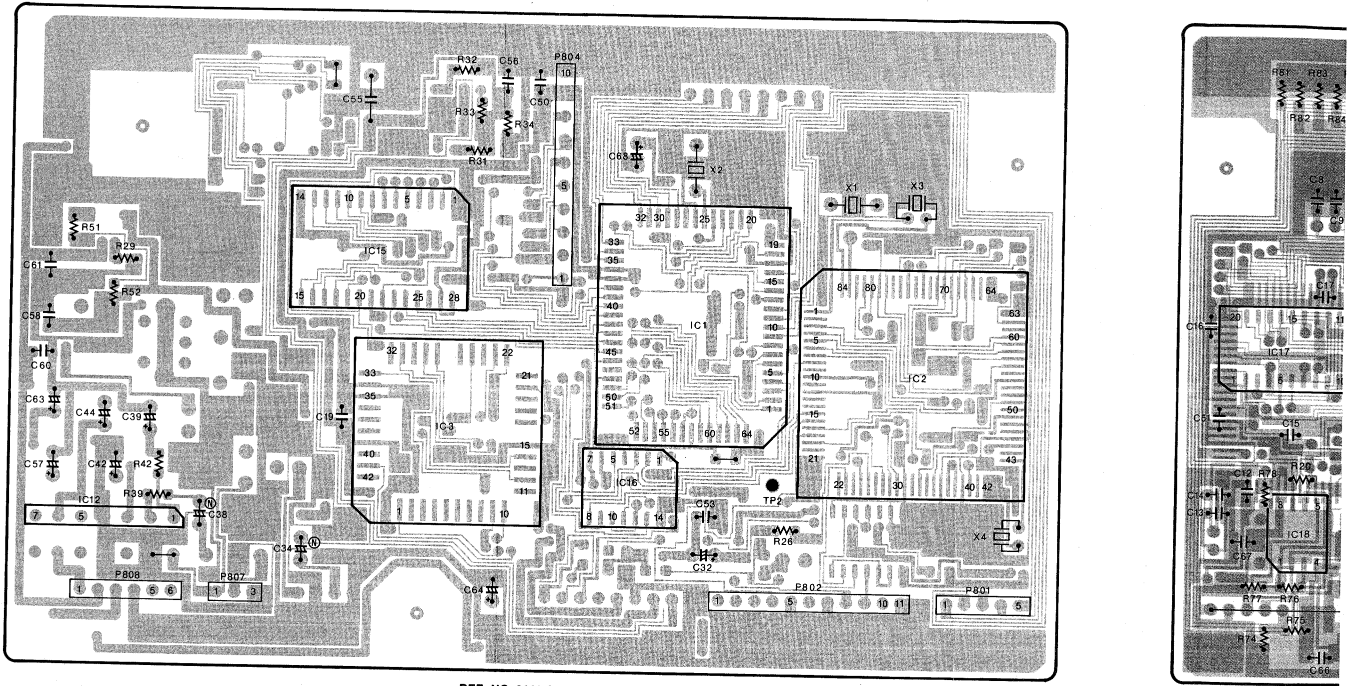
FRONT 2 SCHEMATIC DIAGRAM (FOR AU-520/S)

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY


IC601 μPD78C10G
IC614 MN74HC373S
IC615 (HN27C64FP-20T) VS10375C
IC617 MN74HC374S
IC608 MN74HC32S
IC605 MN74HCU04S
IC616 MN74HC32S
IC618 NJM2903M
IC619 M51951AML
IC607 NJM319M
IC620 MN74HC00S
IC606 MN74HC32S
Q601 UN2213
Q602 2SD1328
Q603 2SD801
X601 VSX0209
X602 VSX0178
X603 VSX0284
FL601 EIR-7QG0106
SW601 VJP2058
VITC INSERT LINE SELECTOR
VITC AUTO OFF W10
P804
FRONT (1) (P805)
CPU 2 CF IN
INT 1
DATA STB 2
READ READY
SEND REQUEST
DATA 3
DATA 2
DATA 1
DATA 0
+5V SYS OUT
GND
EVEN FRAME
P801
SYSTEM CTL
SERIAL 1 OUT
SERIAL 2 IN
CTL PULSE IN
TAPE FWD
REC START
P802
VIDEO (3)
DECODER
VOW
VOB
V BLK
PB SYNC IN
GND
Y CP IN
REC SYNC IN
VITC OUT
PB VD IN
P803
JACK PANEL
POWER SUPPLY
SERVO
TC GEN OUT
INT/EXT
VIGE OUT
+5V SYS
CAMERA CF IN
VIDEO CF IN
TC CF OUT
+5V SYS
A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
②


IC602
MN51040VPC
IC603
MN1237A
IC604
MN74HC374S
IC616
MN74HC32S
IC618
NJM2903M
IC607
NJM319M
IC606
MN74HC32S
IC613
NM4053BS
IC608
NJM319M
IC612
BA301
IC610
NJM082BM
IC609
µPC1519HA
IC605
MN74HCU04S
IC702
NJM4560MD
IC1
NJM2904M
D1
MA151WK
D2
MA151WA
TP601
TP602
TP603
TP604
X603
VSX0284
X604
VSX0098
L601
220µ
REF. NO. 6700 SERIES
FRONT2 SUB VEP80544A
P807
TC HEAD (H) OUT
TC HEAD (C) OUT
GND
AUDIO (P217)
P808
+5V
−5V
+9V
GND
ALL REC (L)
AUDIO (P209)
P806
TC SW IN
GND
TC OUT (H)
GND
TC OUT (C)
P901-4
P901-5
P901-6
P901-8
P901-7
JACK PANEL
REF. NO. 6000 SERIES
9
10
11
12
13
14
15
16
17
18

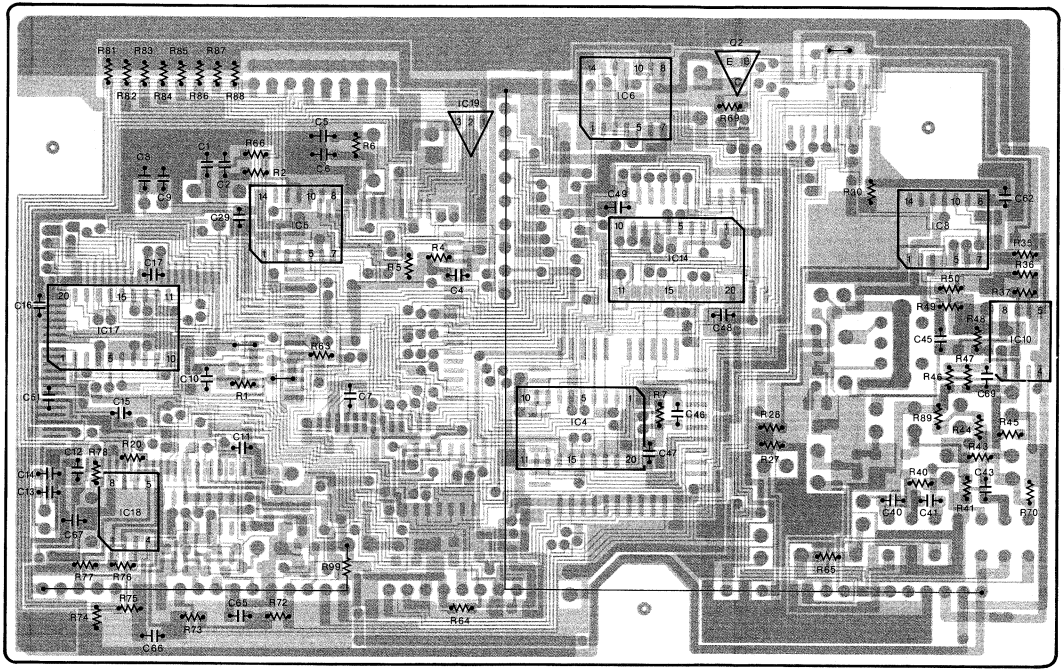
FRONT 2 P.C. BOARD (VEP86016F) (FOR AU-505)


C
B
A
①
1
2
3
4
5
6
R32
C56
P804
10
5
1
C55
C50
R33
R34
R31
C68
X2
X1
X3
IC15
14
10
5
1
15
20
25
28
IC1
32
30
25
20
33
35
40
45
50
51
52
55
60
64
19
15
10
5
1
IC2
84
80
70
64
63
60
50
43
42
40
30
22
21
15
10
5
1
IC3
32
22
33
35
21
40
42
15
11
10
1
IC16
7
5
1
8
10
14
TP2
C53
R26
C32
X4
R51
R29
C61
R52
C58
C60
C63
C44
C39
C57
C42
R42
R39
IC12
7
5
1
C38
C34
C19
C64
P808
1
5
6
P807
1
3
P802
1
5
10
11
P801
1
5
R81
R83
R82
R84
C8
C9
C17
C16
IC17
20
15
11
1
5
C61
C15
C12
R78
R20
C14
C13
IC18
8
5
1
4
C67
R77
R76
R75
R74
C66

REF. NO. 6600 SERIES (COMPONENT SIDE)

REVERSE SIDE
FRONT 2
SCHEMATIC DIAGRAM

Effective from
Serial No. H9TNA0128 (FOR AU-505)


R81
R83
R85
R87
R82
R84
R86
R88
IC19
3 2 1
C5
R6
C6
R66
R2
C1
C2
C8
C9
C29
IC5
14 10 8
1 5 7
R5
R4
C4
C17
C16
IC17
20 15 11
1 5 10
C10
R1
R63
C7
C51
C15
C11
R20
C12
R78
C14
C13
IC18
8 5
1 4
C67
R99
R77
R76
R75
R74
R73
C65
R72
C66
R64
Q2
E B
C
IC6
14 10 8
1 5 7
R69
C49
IC14
10 5 1
11 15 20
C48
IC4
10 5 1
11 15 20
R7
C46
C47
R28
R27
R30
IC8
14 10 8
1 5 7
C62
R35
R36
R37
R50
R49
R48
C45
IC10
8 5
4
R47
R46
C69
R89
R44
R45
R43
R40
C43
C40
C41
R41
R70
R65

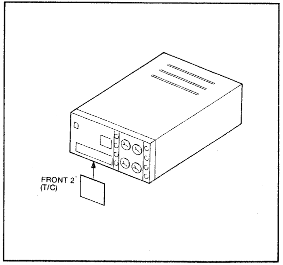
(FOIL SIDE) REF. NO. 6600 SERIES

6 7 8 9 10

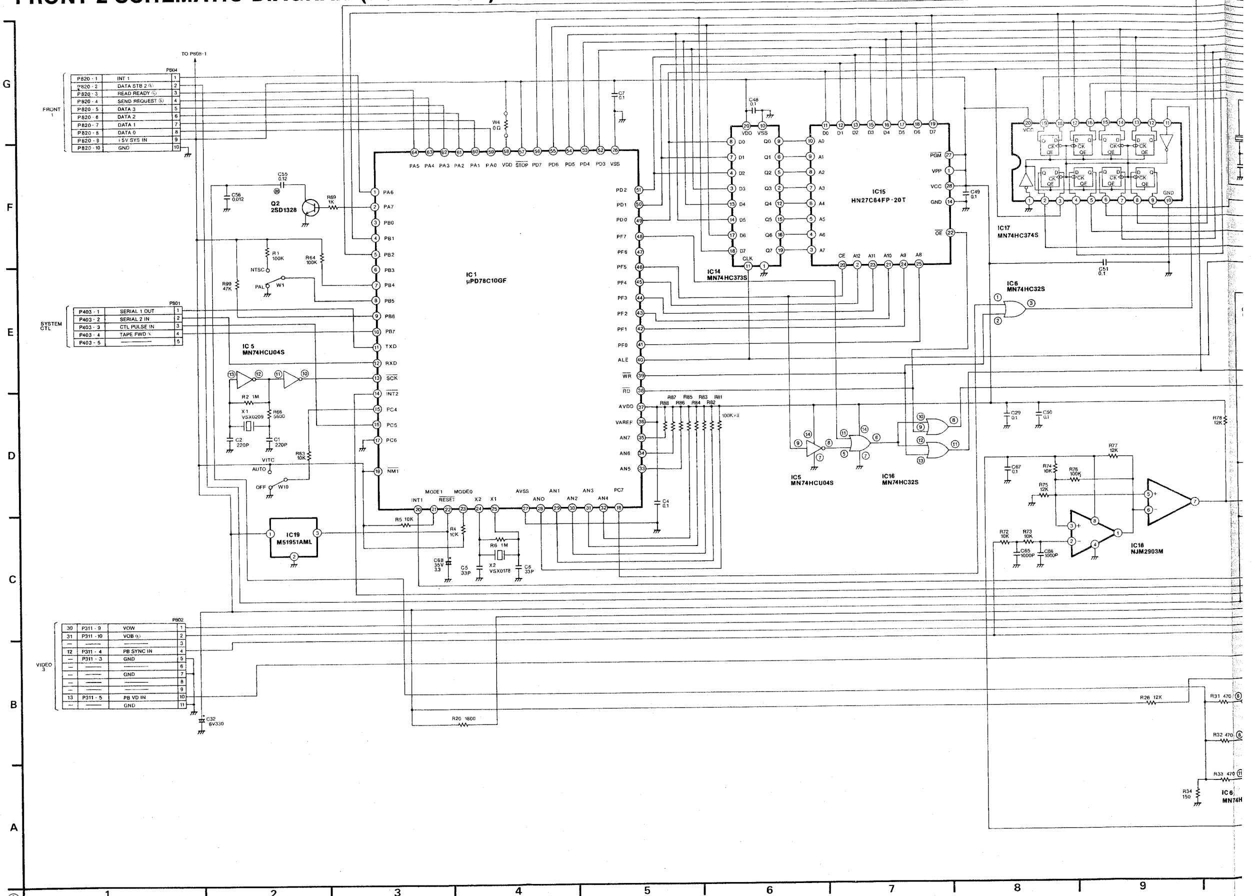
FRONT (2) P.C.B.	
Transistors	
Q6602	C-9
Integrated Circuits	
IC6601	B-4
IC6602	B-5
IC6603	B-3
IC6604	B-8
IC6605	C-7
IC6606	C-8
IC6608	C-10
IC6610	B-10
IC6612	B-1
IC6614	C-9
IC6615	C-3
IC6616	B-4
IC6617	B-6
IC6618	B-6
IC6619	C-8
Test Points	
TP6602	B-4

ADDRESS INFORMATION

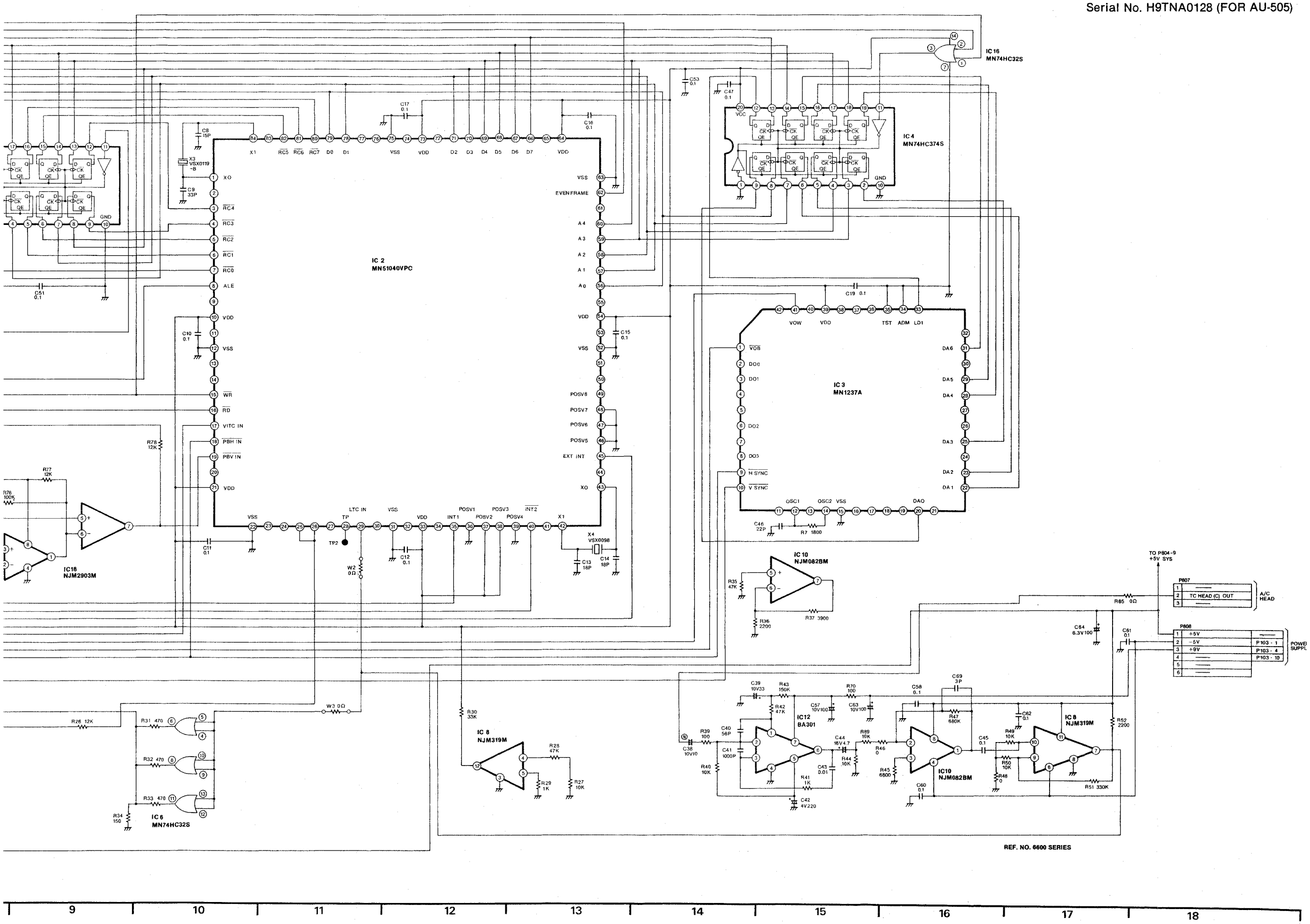
P.C. BOARD LOCATION



FRONT 2 SCHEMATIC DIAGRAM (FOR AU-505)


TO P808-1
P804
P820 - 1 INT 1 1
P820 - 2 DATA STB 2 Ⓛ 2
P820 - 3 READ READY Ⓛ 3
P820 - 4 SEND REQUEST Ⓛ 4
P820 - 5 DATA 3 5
P820 - 6 DATA 2 6
P820 - 7 DATA 1 7
P820 - 8 DATA 0 8
P820 - 9 +5V SYS IN 9
P820 - 10 GND 10
FRONT 1
P801
P403 - 1 SERIAL 1 OUT 1
P403 - 2 SERIAL 2 IN 2
P403 - 3 CTL PULSE IN 3
P403 - 4 TAPE FWD Ⓛ 4
P403 - 5 5
SYSTEM CTL
P802
30 P311 - 9 VOW 1
31 P311 - 10 VOB Ⓛ 2
3
12 P311 - 4 PB SYNC IN 4
P311 - 3 GND 5
6
GND 7
8
9
13 P311 - 5 PB VD IN 10
GND 11
VIDEO 3
C32 6V330
C56 0.012
C55 0.12
Q2 2SD1328
R69 1K
R1 100K
NTSC
PAL
W1
R64 100K
R99 47K
IC 5 MN74HCU04S
R2 1M
X1 VSX0209
R66 5600
C2 220P
C1 220P
R63 10K
VITC
AUTO
OFF
W10
IC19 M51951AML
W4 0Ω
C7 0.1
IC1 μPD78C10GF
PA5 PA4 PA3 PA2 PA1 PA0 VDD STOP PD7 PD6 PD5 PD4 PD3 VSS
PA6 PA7 PB0 PB1 PB2 PB3 PB4 PB5 PB6 PB7 TXD RXD SCK INT2 PC4 PC5 PC6 NM1
PD2 PD1 PD0 PF7 PF6 PF5 PF4 PF3 PF2 PF1 PF0 ALE WR RD AVDD VAREF AN7 AN6 AN5
INT1 MODE1 RESET MODE0 X2 X1 AVSS AN0 AN1 AN2 AN3 AN4 PC7
R5 10K
R4 1K
C68 35V 3.3
C5 33P
R6 1M
X2 VSX0178
C6 33P
C4 0.1
R87 R85 R83 R81
R88 R86 R84 R82
100K×8
C48 0.1
VDD VSS
D0 D1 D2 D3 D4 D5 D6 D7
Q0 Q1 Q2 Q3 Q4 Q5 Q6 Q7
CLK
IC14 MN74HC373S
IC15 HN27C64FP-20T
A0 A1 A2 A3 A4 A5 A6 A7
D0 D1 D2 D3 D4 D5 D6 D7
PGM VPP VCC GND OE
CE A12 A11 A10 A9 A8
C49 0.1
IC17 MN74HC374S
VCC GND
CK OE
C51 0.1
IC6 MN74HC32S
IC5 MN74HCU04S
IC16 MN74HC32S
C29 0.1
C50 0.1
R78 12K
C67 0.1
R74 10K
R76 100K
R77 12K
R75 12K
R72 10K
R73 10K
C65 1000P
C66 1000P
IC18 NJM2903M
R26 12K
R20 1800
R31 470
R32 470
R33 470
R34 150
IC6 MN74H
G
F
E
D
C
B
A
①
1 2 3 4 5 6 7 8 9

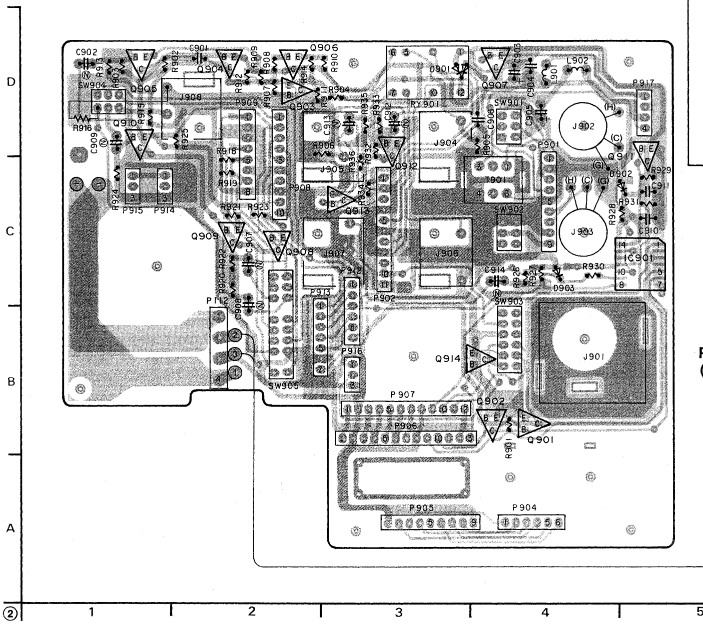
Effective from
Serial No. H9TNA0128 (FOR AU-505)


IC 2
MN51040VPC
IC 3
MN1237A
IC 4
MN74HC374S
IC 16
MN74HC32S
IC 6
MN74HC32S
IC 8
NJM319M
IC 10
NJM082BM
IC 12
BA301
IC18
NJM2903M
X3
VSX0119
-B
X4
VSX0098
TP2
W2
0Ω
W3 0Ω
TO P804-9
+5V SYS
P807
TC HEAD (C) OUT
A/C
HEAD
P808
+5V
-5V
+9V
P103 - 1
P103 - 4
P103 - 10
POWER
SUPPL
9
10
11
12
13
14
15
16
17
18

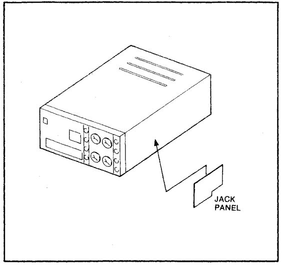
REF. NO. 6600 SERIES

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

JACK PANEL P.C. BOARD (VEP80455A) (FOR AU-520/S)


C902
R913
SW904
Q905
R916
C909
Q910
R915
C901
R902
Q904
R903
J908
R925
R918
R919
R924
P915
P914
R921
R923
Q909
R922
R920
P112
C907
C908
Q908
Q906
R909
R908
R912
R907
P909
R914
Q903
R910
R904
R906
R935
R933
C913
C912
J905
R936
R932
P908
R934
Q913
Q912
J907
P913
P916
SW905
J904
J906
P912
P902
D901
RY901
R905
C906
Q907
C903
C904
L901
L902
SW901
C905
P901
T901
SW902
J902
J903
(H)
(C)
(G)
Q911
D902
R929
C911
R928
R931
C910
P917
IC901
R930
D903
C914
R926
R927
SW903
Q914
J901
P907
P906
Q902
Q901
R901
P905
P904
D
C
B
A
1
2
3
4
5
6
7
②

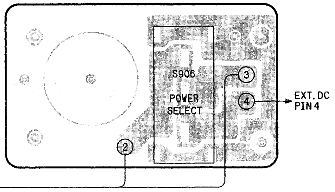
P.C. BOARD LOCATION



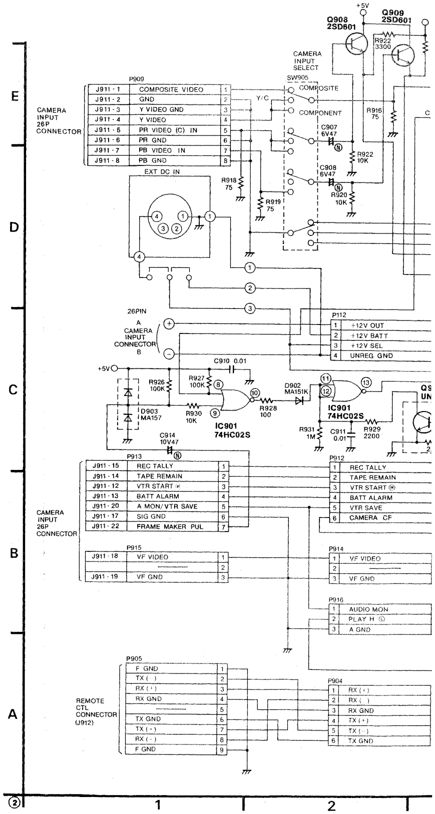
JACK PANEL & POWER SELECT P.C.B.	
Transistors	
Q901	B-4
Q902	B-4
Q903	D-2
Q904	D-2
Q905	D-1
Q906	D-2
Q907	D-4
Q908	C-2
Q909	C-2
Q910	D-1
Q911	C-5
Q912	C-3
Q913	C-3
Q914	B-3
Integrated Circuits	
IC901	C-5

ADDRESS INFORMATION

POWER SELECT SW P.C.B. (VEP80126A) (FOR AU-520/S ONLY)


S906
POWER SELECT
②
③
④
EXT. DC PIN 4

JACK PANEL SCHEMATIC DIAGRAM (FO

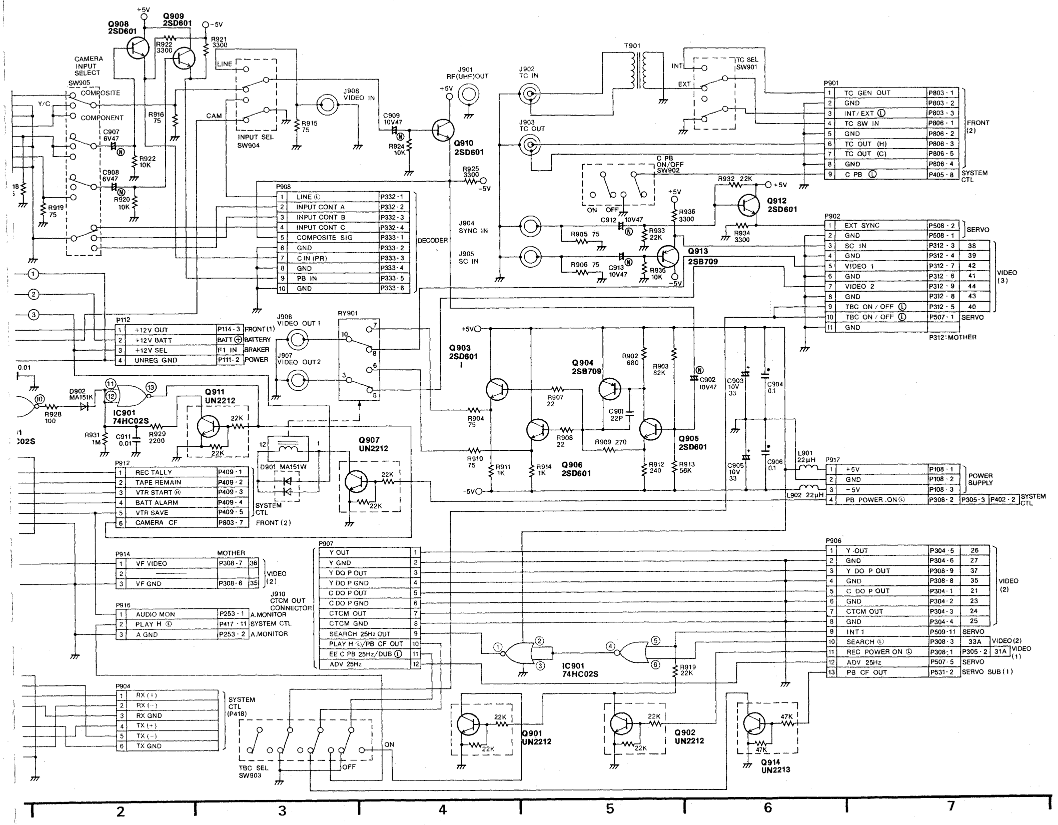

+5V
Q908 2SD601
Q909 2SD601
R922 3300
CAMERA INPUT SELECT
SW905
COMPOSITE
COMPONENT
Y/C
P909
CAMERA INPUT 26P CONNECTOR
J911 - 1 COMPOSITE VIDEO 1
J911 - 2 GND 2
J911 - 3 Y VIDEO GND 3
J911 - 4 Y VIDEO 4
J911 - 5 PR VIDEO (C) IN 5
J911 - 6 PR GND 6
J911 - 7 PB VIDEO IN 7
J911 - 8 PB GND 8
R916 75
C907 6V47
R922 10K
C908 6V47
R920 10K
EXT DC IN
R918 75
R919 75
26PIN
A CAMERA INPUT CONNECTOR B
P112
1 +12V OUT
2 +12V BATT
3 +12V SEL
4 UNREG GND
+5V
C910 0.01
R926 100K
R927 100K
D903 MA157
R930 10K
IC901 74HC02S
R928 100
D902 MA151K
IC901 74HC02S
R931 1M
C911 0.01
R929 2200
C914 10V47
P913
J911 - 15 REC TALLY 1
J911 - 14 TAPE REMAIN 2
J911 - 12 VTR START 3
J911 - 13 BATT ALARM 4
J911 - 20 A MON/VTR SAVE 5
J911 - 17 SIG GND 6
J911 - 22 FRAME MAKER PUL 7
CAMERA INPUT 26P CONNECTOR
P912
1 REC TALLY
2 TAPE REMAIN
3 VTR START
4 BATT ALARM
5 VTR SAVE
6 CAMERA CF
P915
J911 - 18 VF VIDEO 1
2
J911 - 19 VF GND 3
P914
1 VF VIDEO
2
3 VF GND
P916
1 AUDIO MON
2 PLAY H
3 A GND
P905
F GND 1
TX (-) 2
RX (+) 3
RX GND 4
5
TX GND 6
TX (+) 7
RX (-) 8
F GND 9
REMOTE CTL CONNECTOR (J912)
P904
1 RX (+)
2 RX (-)
3 RX GND
4 TX (+)
5 TX (-)
6 TX GND
E
D
C
B
A
1
2
②

REVERSE SIDE

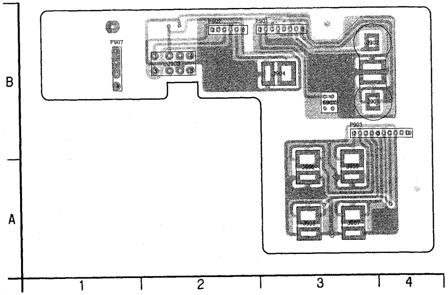
**FRONT 2
SCHEMATIC DIAGRAM**

NOTE:
AU-520/S = USED FOR AU-520S & AU-520
AU-505 = USED FOR AU-505 ONLY

ATIC DIAGRAM (FOR AU-520/S)


Q908 2SD601
Q909 2SD601
+5V
-5V
R922 3300
R921 3300
CAMERA INPUT SELECT
SW905
Y/C
COMPOSITE
COMPONENT
C907 6V47
C908 6V47
R916 75
R922 10K
R920 10K
R919 75
LINE
CAM
INPUT SEL SW904
R915 75
J908 VIDEO IN
C909 10V47
R924 10K
J901 RF(UHF)OUT
Q910 2SD601
R925 3300
J902 TC IN
J903 TC OUT
T901
INT
EXT
TC SEL SW901
C PB ON/OFF SW902
ON OFF
C912 10V47
R932 22K
Q912 2SD601
R936 3300
R934 3300
R933 22K
R935 10K
Q913 2SB709
J904 SYNC IN
J905 SC IN
R905 75
R906 75
C913 10V47
P908
1 LINE Ⓛ P332-1
2 INPUT CONT A P332-2
3 INPUT CONT B P332-3
4 INPUT CONT C P332-4
5 COMPOSITE SIG P333-1
6 GND P333-2
7 C IN (PR) P333-3
8 GND P333-4
9 PB IN P333-5
10 GND P333-6
DECODER
P901
1 TC GEN OUT P803-1
2 GND P803-2
3 INT/EXT Ⓛ P803-3
4 TC SW IN P806-1
5 GND P806-2
6 TC OUT (H) P806-3
7 TC OUT (C) P806-5
8 GND P806-4
9 C PB Ⓛ P405-8
FRONT (2)
SYSTEM CTL
P902
1 EXT SYNC P508-2
2 GND P508-1
3 SC IN P312-3 38
4 GND P312-4 39
5 VIDEO 1 P312-7 42
6 GND P312-6 41
7 VIDEO 2 P312-9 44
8 GND P312-8 43
9 TBC ON/OFF Ⓛ P312-5 40
10 TBC ON/OFF Ⓛ P507-1
11 GND
SERVO
VIDEO (3)
SERVO
P312:MOTHER
P112
1 +12V OUT P114-3 FRONT (1)
2 +12V BATT BATT⊕ BATTERY
3 +12V SEL F1 IN BRAKER
4 UNREG GND P111-2 POWER
J906 VIDEO OUT 1
J907 VIDEO OUT 2
RY901
Q903 2SD601
Q904 2SB709
Q905 2SD601
Q906 2SD601
R902 680
R903 82K
C902 10V47
C903 10V 33
C904 0.1
C905 10V 33
C906 0.1
R907 22
R904 75
R908 22
R909 270
C901 22P
R910 75
R911 1K
R914 1K
R912 240
R913 56K
L901 22μH
L902 22μH
P917
1 +5V P108-1
2 GND P108-2
3 -5V P108-3
4 PB POWER ON Ⓛ P308-2 P305-3 P402-2
POWER SUPPLY
SYSTEM CTL
D902 MA151K
R928 100
IC901 74HC02S
R931 1M
C911 0.01
R929 2200
Q911 UN2212
22K
D901 MA151W
Q907 UN2212
P912
1 REC TALLY P409-1
2 TAPE REMAIN P409-2
3 VTR START Ⓗ P409-3
4 BATT ALARM P409-4
5 VTR SAVE P409-5
6 CAMERA CF P803-7
SYSTEM CTL
FRONT (2)
P914 MOTHER
1 VF VIDEO P308-7 36
2
3 VF GND P308-6 35
VIDEO (2)
J910 CTCM OUT CONNECTOR
P916
1 AUDIO MON P253-1 A.MONITOR
2 PLAY H Ⓛ P417-11 SYSTEM CTL
3 A GND P253-2 A.MONITOR
P907
Y OUT 1
Y GND 2
Y DO P OUT 3
Y DO P GND 4
C DO P OUT 5
C DO P GND 6
CTCM OUT 7
CTCM GND 8
SEARCH 25Hz OUT 9
PLAY H Ⓛ/PB CF OUT 10
EE C PB 25Hz/DUB Ⓛ 11
ADV 25Hz 12
P906
1 Y OUT P304-5 26
2 GND P304-6 27
3 Y DO P OUT P308-9 37
4 GND P308-8 35
5 C DO P OUT P304-1 21
6 GND P304-2 23
7 CTCM OUT P304-3 24
8 GND P304-4 25
9 INT 1 P509-11 SERVO
10 SEARCH Ⓛ P308-3 33A VIDEO (2)
11 REC POWER ON Ⓛ P308-1 P305-2 31A VIDEO (1)
12 ADV 25Hz P507-5 SERVO
13 PB CF OUT P531-2 SERVO SUB (1)
IC901 74HC02S
R919 22K
P904
1 RX (+)
2 RX (-)
3 RX GND
4 TX (+)
5 TX (-)
6 TX GND
SYSTEM CTL (P418)
TBC SEL SW903
ON
OFF
Q901 UN2212
Q902 UN2212
Q914 UN2213
47K
2
3
4
5
6
7

JACK PANEL P.C. BOARD (VEP80305A)
(FOR AU-505)


P907
P902
P901
P903
J902
J903
J904
J901
J905
J906
J907
B
A
1
2
3
4

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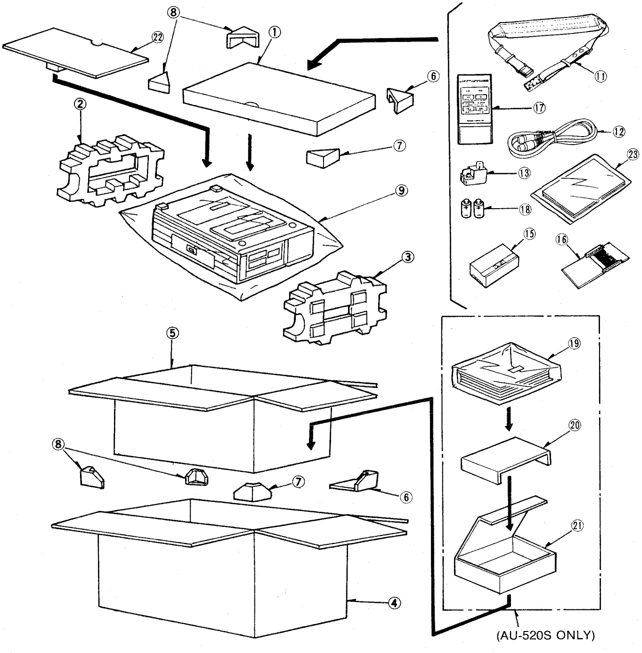
Mechanical Parts List

PACKING CASE

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VPG3202	ACCESSARY CASE	1	
2		VPN1761	CUSHION (BACK)	1	
3		VPN1760	CUSHION (FRONT)	1	
4		VPG3200	PACKING CASE (1)	1	FOR OUTER PACKING
5		VPG3201	PACKING CASE (2)	1	FOR INNER PACKING
6		VPN1788	CORNER PAD (A)	2	
7		VPN1789	CORNER PAD (B)	2	
8		VPN1791	CORNER PAD (C)	4	
9		VPF0230	POLYETHYLENE BAG (1)	1	
11		VFC0379	SHOULDER STRAP	1	
16		VFK0404	EXTENSION BOARD	1	
19		VPF0210	POLYETHLENE BAG (2)	1	AU-520S ONLY
20		VPG4185	S/M CUSHION	1	AU-520S ONLY
21		VPG4184	S/M CASE	1	AU-520S ONLY
22		VPN2093	CUSHION (TOP)	1	
23		VQT3695	OPERATING INSTRUCTIONS (ENGLISH, GERMAN, FRENCH, SPANISH)	1	AU-520 ONLY

Packing Case



FRAME ASSEMBLY (1)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VYF1537	CASSETTE COVER UNIT	1	
1-1		VHD0602	CASSETTE COVER SCREW	2	
2		VYP3212	SIDE PANEL UNIT	1	
2-1		VGM0681	SIDE PANEL	1	
2-2		VMS4210	STRAP PIN	1	
2-4		VRF0055	FAN MOTOR	1	
2-5		VMG0439	CUSHION	1	
2-6		VMP1714	MOTOR PLATE	1	
2-7		VSC2526	SHIELD PLATE	1	
2-9		VMG0437	PAD (M)	1	
2-10		VMG0460	CUSHION	8	
3		VGU5240	BATTERY DOOR OPENER	1	
4		VMB1654	BATTERY DOOR OPENER SPRING	2	
5		VKF1509	BATTERY DOOR	1	
6		VMS3300	BATTERY DOOR PIN	2	
7		VDB0927	BATTERY DOOR SUPPORTER	1	
8		VGQ1882	LED HOLDER	1	
9		VGL0293	LED COVER (1)	1	
10		VGU4554	SLIDE SW COVER (M)	1	
11		VGU3465	SLIDE SW KNOB (L)	4	
12		VGU4555	SLIDE SW KNOB (1)	2	
13		VST0059	POWER SW	1	
14		VYP3472	FRONT PANEL UNIT	1	
14-1		VGU3462	MODE SELECT KNOB	1	
14-2		VGU3463	MODE SELECT KNOB	1	
14-3		VGL0171	LED COVER (2)	9	
14-4		VGH1901	FRONT DOOR NAME PLATE	1	
14-5		VGH2449	AUDIO METER NAME PLATE	1	
14-6		VGH1108	AUDIO VOLUME NAME PLATE	2	
14-7		VMG0372	SLIDE SW WATERTIGHT SEAL	3	
14-8		VMP1153	RUBBER PRESSURE PLATE(A)	1	
14-9		VMP1154	RUBBER PRESSURE PLATE(B)	1	
14-10		VKW0751	LCD COVER	1	
16		VMS3300	FRONT DOOR PIN	2	
17		VKF1508	FRONT DOOR	1	
18		VMC0229	FRONT DOOR SPRING	1	
19		VDB0969	FRONT DOOR SUPPORTER	1	
20		VMG0398	METER PRESSURE RUBBER	2	
21		VMP1092	METER SUPPORT PLATE	1	
22		VGU3466	VOLUME KNOB (A)	8	
23		VMG0378	VOLUME WATERTIGHT SEAL (A)	8	
24		VSE0096	AUDIO METER	2	
25		VSE0099	CH4/V TRACKING METER	1	
26		VMG0399	METER PACKING	2	
27		VGU4554	SLIDE SW COVER (2)	1	
28		VYP2230	TOP PANEL UNIT	1	
28-1		VHD0314	TOP PANEL SCREW (A)	2	
28-2		VGM0212	TOP PANEL	1	
28-3		VHD0315	TOP PANEL SCREW (B)	2	
28-4		VKA0070	TOP PANEL PROTECTOR	2	
28-5		VMX1162	POLY WASHER	4	
28-6		VMG0400	RUBBER PAD	2	
28-7		VMG0441	CUSHION	1	
29		VYF1328	SERVICE COVER UNIT	1	
29-1		VHD0338	SERVICE COVER SCREW	2	
29-2		VMX1089	WASHER	2	
30		VYP2227	BOTTOM PANEL UNIT	1	
30-1		VGM0363	BOTTOM PANEL	1	
30-2		VKA0058	BOTTOM PROTECTOR (A)	2	
30-3		VKA0071	BOTTOM PROTECTOR (B)	2	
31		VGU4554	SLIDE SW KNOB (2)	15	
32		VGU3461	POWER SELECT KNOB	1	
33		VGM0680	REAR PANEL	1	
34		VEJ1100	JACK PANEL UNIT	1	
34-1		VKF0834	HEADPHONE JACK WATERTIGHT SEAL	1	
34-2		VGH1900	JACK PLATE (AUDIO)	1	
34-3		VGH1899	JACK PLATE (VIDEO)	1	
34-4		VGH1103	JACK PLATE (POWER SELECT)	1	
34-5		VGH1629	JACK PLATE (MONITOR)	1	
34-6		VJS1956	REM 9 PIN TERMINAL	1	
35		VMG0371	SLIDE SW WATERTIGHT SEAL (B)	9	
34-7		VMS2724	SCREW	2	
36		VMG0372	SLIDE SW WATERTIGHT SEAL (C)	8	
37		VMG0370	SLIDE SW WATERTIGHT SEAL (A)	1	
38		VMG0373	VOLUME WATERTIGHT SEAL (B)	2	
39		VMS4216	STRAP PIN	1	
40		VGU3917	MONITOR LEVEL KNOB	1	
41		VJS2077	XLR SPACER	4	
42		VJS2077	AUDIO IN TERMINAL	4	
43		VJP1894	AUDIO OUT TERMINAL	4	
44		VJJ0211	RCA CONNECTOR	1	
45		VGU3459	VOLUME KNOB	2	
46		VJP2632	EXT.DC TERMINAL	1	
47		VJS1957	CAMERA IN TERMINAL	1	
48		VJJ0091	BNC JACK	5	
49		VJS1921	CTCM OUT TERMINAL	1	
50		VMZ1051	INSULATION SHEET	1	
51		VWZ0039	SILICON TUBE (3 METER)	1	
52		VHD0375	BOTTOM PANEL SCREW	4	
53		VMX1162	POLY WASHER	4	
55		VMX1164	XLR SPACER	4	
56		VJS2795	LEMO CONNECTOR	2	
57		VMX1705	WASHER	2	
58		VMG0445	LED COVER	2	
59		VGF0257	SW COVER (C)	1	
60		VGF0255	SW COVER (A)	4	
61		VXA3837	JACK SHIELD	1	
62		VSE0098	AUDIO METER	1	
63		VEE5233	RF CONV. CABLE	1	
65		VHD0406	SCREW	1	
80		XWE5FZ	WASHER	6	
81		XNKV0001	WASHER	9	
82		XSB3+6FZ	SCREW	11	
83		XSB3+8FZ	SCREW	4	
84		XST26+4	SCREW	18	
85		XSN26+10FCS	SCREW	16	
86		XSN26+8FCS	SCREW	2	
87		XSN26+6FCS	SCREW	4	
89		XSN26+4	SCREW	17	
90		XSN3+6S	SCREW	3	
91		XSN26+6	SCREW	5	
92		XSS26+6FC	SCREW	4	
93		XWC26B	WASHER	1	
94		XMG6C	NUT	2	
95		XWGV25D6G	WASHER	2	

FRAME ASSEMBLY (2)

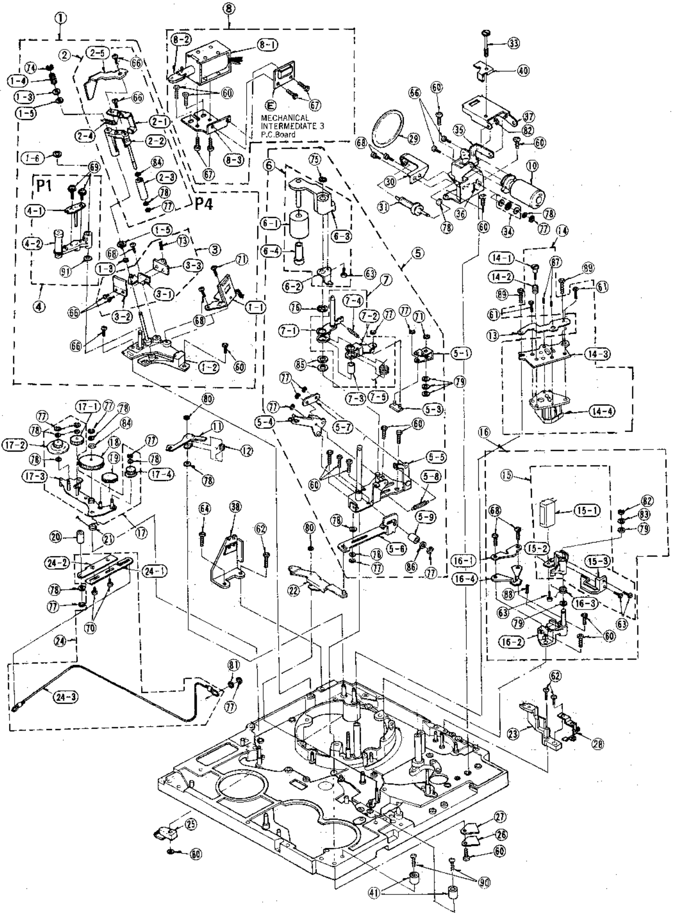
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VMZ0931	INSULATION PLATE (L)	1	
2		VMD0930	SIDE FRAME (L)	1	
3		VMP1147	SOCKET SUPPORTER	1	
4		VGQ1463	GUIDE (L)	1	
5		VYQ0116	BATTERY SPRING UNIT	1	
5-1		VMB1782	BATTERY SPRING	2	
5-2		VMG0378	RUBBER BUSHING	2	
6		VMX1201	WIRE COVER	1	
8		VGQ1462	GUIDE (R)	1	
10		VQL3678	NAME LABEL (1)	1	
11		VMP1062	PCB SUPPORTER (1)	1	
12		VGQ1256	WIRE PROTECTOR (1)	1	
13		VMK0279	CHASSIS FRAME	1	
14		VQL4732	NAME LABEL (2)	1	
15		VMP1149	VIDEO PCB SUPPORTER	3	
16		VSC1962	VIDEO SHIELD PLATE	2	
17		VQL4733	NAME LABEL (3)	1	
18		VQL3656	NAME LABEL (4)	1	
19		VGQ1161	UNIT RACK	6	
20		VJF0446	PCB HOOK (1)	2	
21		VJF0445	PCB HOOK (2)	2	
22		VMD0931	SIDE FRAME (R)	1	
23		VMZ0932	INSULATION PLATE (R)	1	
24		VKM1708	RF CONVERTER CASE	1	
25		VMP1170	RF CONVERTER SUPPORTER	1	
26		VEJ0750	BATTERY HOLDER	1	
27		VMP1063	PCB SUPPORTER (2)	1	
29		VSC2007	AUDIO SHIELD PLATE	1	
30		VGQ1247	WIRE PROTSCTOR (3)	1	
32		VGQ1248	WIRE PROTECTOR (2)	1	
33		VGQ1257	WIRE PROTECTOR (4)	1	
35		VSQ0560	BRAKER	1	
36		VMD1209	BATTERY COVER	1	
37		VJF0542	BATTERY HOLDER COVER	1	
38		VGQ1411	BATTERY LEVER	2	
39		VGU4052	BATTERY BUTTON (B)	1	
40		VGU4051	BATTERY BUTTON (A)	1	
41		VMB1784	BATTERY LEVER SPRING	2	
42		VJF0541	BATTERY HOLDER	1	
43		VGQ1412	BATTERY STOPPER	1	
44		VMB1781	BATTERY STOPPER SPRING	1	
45		VMP1386	HOLDER	1	
46		VGF0327	SW COVER	1	
47		VGH2133	E-E SW PLATE	1	
48		VMX1488	SHIELD PLATE	1	
49		VMP1804	SUPPORT ANGLE (R)	1	
50		VMX1331	SPACER (B)	1	
51		VXA3820	P.C.B.SHIELD PLATE	1	
52		VMX1558	WASHER	2	
53		VMP1805	SUPPORT ANGLE (L)	1	
80		XSB3+6FR	SCREW	14	
82		XTV3+6FR	SCREW	28	
83		XYN2+F6	SCREW	2	
84		XTV3+6F	SCREW	12	
85		XSB3+10S	SCREW	2	
86		XYE3+EF8	SCREW	1	
87		XWGV3F6G	SPACER	1	
88		XTV3+5J	SCREW	12	
89		XSB3+6S	SCREW	4	
90		XTB3+6FFZ	SCREW	1	
91		XYN3+F6	SCREW	2	
92		XYN3+F6RS	SCREW	2	
93		XYN2+C8FZ	SCREW	2	
94		XSB3+6FZ	SCREW	2	
95		XYN2+C6	SCREW	2	
96		XSS3+6S	SCREW	2	
97		XTS3+6F	SCREW	3	
98		XYN3+C8S	SCREW	2	
99		XTV3+8F	SCREW	2	
100		XTS26+6F	SCREW	3	

MECHANICAL CHASSIS ASSEMBLY (1)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VMD1202	LOADING GUIDE P6	1	
2		VMD1195	LOADING GUIDE(B)	1	
3		VDG0377	GUIDE GEAR	1	
4		VXA3198	P2 POST (W)	1	
4-1		VMS3704	UPPER FLANGE (P3)	1	
4-2		VXP0936	P3 POST ROLLER (A) U (P3)	1	
4-3		VMS2801	LOWER FLANGE (P3)	1	
4-4		VMB1623	POST SPRING M(P3)	1	
5		VXA2758	POST GEAR U	1	
5-1		VDG0378	GEAR	1	
6		VEG0696	DRUM U	1	
6-1		VEH0384	UPPER DRUM U	1	
6-2		VXA2803	RT ARM U W/BRUSH	1	
6-2-1		VSA0054	BRUSH	1	
6-2-2		XYN26+J4	SCREW	1	
7		VXA3201	P5 POST U (P5)	1	
7-1		VMS3704	UPPER FLANGE (P5)	1	
7-2		VXP0936	ROLLER ASSY U (P5)	1	
7-3		VMS2801	LOWER FLANGE (P5)	1	
7-4		VMB1623	POST SPRING (P5)	1	
7-5		VXA3202	P5 POST (1) ASSY U (P5)	1	
7-6		VMA6976	SLIDE PLATE (P5)	1	
7-7		VMX1138	ROD COLLAR (P5)	1	
7-8		VMM0183	ROD D (P5)	1	
7-9		VMB1791	P5 ARM SPRING (P5)	1	
7-10		VMX1131	SPACER (P5)	1	
8		VXA3203	P6 POST U (P6)	1	
8-1		VMS3705	UPPER FLANGE (P6)	1	
8-2		VXP0937	ROLLER ASSY.U (P6)	1	
8-3		VMS3706	LOWER FLANGE (P6)	1	
8-4		VMB1623	POST SPRING (P6)	1	
8-5		VXA3248	POST (1) U (P6)	1	
8-6		VMA7269	SLIDE PLATE (P6)	1	
8-7		VMX1321	ROD COLLAR (P6)	1	
8-8		VMM0194	ROD (P6)	1	
8-9		VMX1131	SPACER (P6)	1	
9		VXA4111	S LOADING U	1	
9-1		VMB1617	P6 LOCK SPRING	1	
9-2		VMB1617	P6 LOCK SPRING	1	
10		VXA3177	P9 POST U (P9)	1	
10-1		VMS3316	UPPER FLANGE (P9)	1	
10-2		VXP0815	ROLLER ASSY. U (P9)	1	
10-3		VMS3317	LOWER FLANGE (P9)	1	
10-4		VMB1677	POST SPRING (P9)	1	
11		VXA4100	T.LOADING (2) U	1	
11-1		VMB1628	EJECT SLIDE SPRING	1	
11-2		VMB2174	LOADING SLIDE SPRING	1	
12		VXL1737	P11 ARM BASE U (P11)	1	
12-1		VMS3705	UPPER FLANGE (P11)	1	
12-2		VXP0937	ROLLER ASSY U (P11)	1	
12-3		VMS3614	LOWER FLANGE (P11)	1	
12-4		VMB1677	POST SPRING (P11)	1	
13		VDP1129	RING ROLLER (A)	3	
14		VDP1103	RING ROLLER (B)	6	
15		VMS3703	UPPER FLANGE (P8)	1	
16		VXP0936	POST ROLLER (A) U (P6)	1	
17		VMS2800	LOWER FLANGE (P8)	1	
18		VMB1677	POST SPRING (P8)	1	
19		VDG0457	CAM GEAR (2)	1	
20		VXA3187	LOADING GUIDE (C)	1	
20-1		VEK3674	PHOTO SENSOR U	1	
21		VEK3220	REC INHIBIT SW U	1	
22		VMB1792	P11 SPRING	1	
23		VDG0381	INTERMEDIATE GEAR (2)	1	
24		VMX0983	CUT WASHER	2	
25		VDG0380	SUPPLY GEAR	1	
26		VDG0382	WORM WHEEL (2)	1	
27		VXA3233	P9 STOPPER U	1	
27-1		VMC0254	P9 ADJ PLATE	1	
27-2		VMA7281	P9 STOPPER	1	
27-3		VHD0356	HEX-SCREW	1	
28		VEK2372	DEW SENSOR	1	
29		VMB1790	P6 ROD SPRING	1	
30		VMM0196	EJECT ROD	1	
31		VXL1718	P11 CONTROL ARM U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
32		VDP1102	RING ROLLER	3	
33		VMX1042	WASHER (P10)	1	
34		VDP1100	P10 ROLLER (P10)	1	
35		VMC0281	P5 GUIDE SPRING	1	
36		VXA3218	P11 ARM BASE U	1	
37		VMB1672	P11 SPRING	1	
38		VMX1316	GUIDE STOPPER	4	
39		VXA3235	P9 GUIDE ASSY U	1	
40		VMD1197	MAIN LED COVER	1	
41		VEK3607	MAIN LED PLATE	1	
42		VMD1196	MAIN LED CASE	1	
43		VMC0288	A/C SHIELD PLATE	1	
44		VMA7252	WIRE GUIDE	1	
45		VDP1131	ROLLER	1	
46		VMS3704	UPPER FLANGE (P7)	1	
47		VXP0938	P7 POST ROLLER (A) U (P7)	1	
48		VMX1161	LOWER FLANGE (P7)	1	
49		VMB1623	POST SPRING (P7)	1	
50		VMD1203	LOADING GUIDE P3	1	
51		VMX1102	INSULATION SHEET	1	
81		XYN3+A8BW	SCREW	2	
82		XXE2C25FP	HEX-SCREW	4	
83		XUC15FP	E-RING	5	
84		XUC2FP	E-RING	4	
85		XQN2+A3	SCREW	2	
86		XQN2+A4	SCREW	3	
87		XYN3+C8	SCREW	3	
88		XQS2+A6	SCREW	3	
89		XWGV2Y4G	WASHER	1	
90		XWG0007	WASHER	2	
91		XWGV2D4G	WASHER	7	
92		XXE16D2FP	HEX-SCREW	1	
93		XYN2+C4	SCREW	1	
94		XTV26+6F	SCREW	18	
95		XWGV0006	WASHER	3	
96		XWGV4Y6G	WASHER	1	
97		XWGV2Y6G	WASHER	1	
98		XYNV26+K6	SCREW	2	
99		XTV26+6F	SCREW	3	
100		XXE2D25FP	HEX-SCREW	2	
101		XWGV3D6G	WASHER	5	
102		XYN26+C6	SCREW	2	
103		XWGV2Y4G	WASHER	1	
104		XWGV2Y5G	WASHER	1	
105		XSN26+4	SCREW	1	
106		XTV26+8F	SCREW	1	
107		XTV2+5F	SCREW	1	
108		XYN2+C3	SCREW	1	
109		XXE2C25FPS	HEX-SCREW	1	
110		XYN2+J6	SCREW	2	

Mechanical Chassis Assembly (2)



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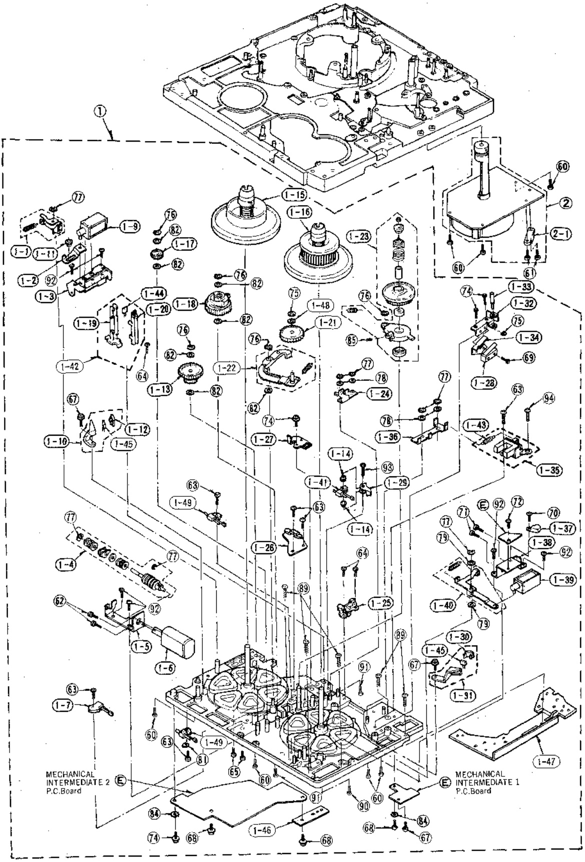
MECHANICAL CHASSIS ASSEMBLY (2)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VXA3194	P2 STOPPER BASE U	1	
1-1		VXA3186	P2 STOPPER U	1	
1-2		VXA3195	P2 STOPPER BASE (1) U	1	
1-3		VMX1161	BEARING HOLDER	2	
1-4		VMB1653	SPRING	1	
1-5		VDB0778	BEARING	2	
1-6		VMX1427	WASHER	1	
2		VXL2091	P4 ARM U (P4)	1	
2-1		VXA3237	MAGNET U	1	
2-2		VXL1551	P4 ARM (1) U (P4)	1	
2-3		VDP1100	P4 ROLLER (P4)	1	
2-4		VMB1773	SPRING (P4)	1	
2-5		VMA8298	TENSION BALANCER	1	
3		VXA2925	TENSION PLATE SPRING	1	
3-1		VMA7073	ADJ BASE	1	
3-2		VMC0253	TENSION BASE	1	
3-3		VMA7072	TENSION BASE (2)	1	
4		VXL1716	P1 ARM U (P1)	1	
4-1		VXA2788	P1 ARM ADJ BASE U (P1)	1	
4-2		VXL1717	P1 ARM (1) U (P1)	1	
5		VXA3196	PINCH ROLLER BASE U	1	
5-1		VXL1734	TOGGLE ARM A	1	
5-2		VMB1625	PINCH-SPRING	1	
5-3		VXL1720	TOGGLE ARM U	1	
5-4		VXL1537	PINCH ARM LEVER	1	
5-5		VXA3234	PINCH ROLLER BASE (1) U	1	
5-6		VXL1539	ROD	1	
5-7		VML1993	TOGGLE LEVER	1	
5-8		VMB1675	TOGGLE SPRING	1	
5-9		VMX1170	ARM ROLLER	1	
6		VXL1554	PINCH ARM U	1	
6-1		VXP0805	PINCH ROLLER	1	
6-2		VXL1555	PINCH ARM HOLDER	1	
6-3		VXL1538	PINCH ARM (1) U	1	
6-4		VMX1133	PINCH ROLLER SREAVE	1	
7		VXL1736	PINCH CONTROL ARM U	1	
7-1		VXL1733	PINCH CONTROL ARM (B) U	1	
7-2		VML1947	PINCH CONTROL ARM (A) U	1	
7-3		VMX1136	PINCH ARM COLLAR	1	
7-4		VMB1626	PINCH SPRING	1	
7-5		VMB1795	PINCH ARM SPRING	1	
8		VXA3210	PINCH SOLENOID BASE U	1	
8-1		VSJ0074	PINCH SOLENOID	1	
8-2		VMA7258	PINCH SOLENOID PLATE	1	
8-3		VMA7055	PINCH SL BASE	1	
10		VEM0270	LOADING MOTOR	1	
11		VML2111	CONTROL ARM	1	
12		VMB1620	CONTROL ARM SPRING	1	
13		VMA6982	ADJ PLATE	1	
14		VED0050	A/C HEAD U	1	
14-1		VHD0321	SCREW	1	
14-2		VMB1618	HEAD MOUNT SPRING	1	
14-3		VMA7053	HEAD MOUNT BASE	1	
14-4		VBR0137	A/C HEAD	1	
15		VXL1714	FE HEAD ARM U	1	
15-1		VBS0040	FE HEAD	1	
15-2		VXL1715	FE HEAD ARM (1) U	1	
15-3		VMD1200	ARM GUIDE	1	
16		VXA3238	P6 STOPPER BASE U	1	
16-1		VMA7263	P6 STOPPER	1	
16-2		VXA3193	P6 STOPPER BASE (1) U	1	
16-3		VMB1793	FE HEAD ARM SPRING	1	
16-4		VMC0363	P6 BOARD STOPPER	1	
17		VXA2859	EE(EMERGENCY EJECT) IDLER U	1	
17-1		VDG0376	EE GEAR (4)	1	
17-2		VXP0804	IDLER U	1	
17-3		VXL1580	IDLER LEVER (1) U	1	
17-4		VDG0373	EE GEAR (1)	1	
18		VDG0459	EE GEAR (3)	1	
19		VDG0374	EE GEAR (2)	1	
20		VDP0866	BRAKE ROLLER	1	
21		VMB1873	IDLER SPRING	1	
22		VXL1544	PINCH CAM ARM U	1	
23		VMA7251	P5 STOPPER	1	
24		VXQ0009	EE WIRE U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
24-1		VMA6960	ADJ BASE (A)	1	
24-2		VMA6968	ADJ BASE (B)	1	
24-3		VXQ0007	EE WIRE U	1	
25		VMD0960	WIRE GUIDE (1)	1	
26		VMZ1152	INSULATION SHEET	1	
27		VEK3608	MAIN PHOTO U	1	
28		VMA7082	WIRE GUIDE	1	
29		VDV0162	LOADING BELT	1	
30		VXA2903	WORM SUPPORT PLATE	1	
31		VXP0814	WORM GEAR U	1	
32		VXA2800	BELT COVER	1	
33		VHD0358	LOCK SCREW	1	
34		VDB0835	BEARING	1	
35		VXA2760	MOTOR BASE (1) U	1	
36		VDB0833	WORM PLATE	1	
37		VXA2800	BELT COVER U	1	
38		VMA7276	SPRING PLATE	1	
39		VMA7222	ARM STOPPER	1	
40		VMA7079	WIRE COVER	1	
41		VMD1354	HOLDER STOPPER	2	
60		XTV26+6F	SCREW	15	
61		XSN26+6	SCREW	2	
62		XTV26+8F	SCREW	3	
63		XQN2+A4	SCREW	4	
64		XYNV26+K6	SCREW	1	
66		XYN2+C4	SCREW	6	
67		XYN26+C4	SCREW	2	
68		XYNV26+K5	SCREW	6	
69		XYN2+F4	SCREW	2	
70		XQN2+A1.5	SCREW	2	
71		XTV26+5F	SCREW	1	
73		XXE2C8FPS	HEX-SCREW	1	
74		XWGV0007	WASHER	1	
75		XUC3FP	E-RING	1	
76		XUC4FP	E-RING	1	
77		XUC15FP	E-RING	15	
78		XWGV2D4G	WASHER	11	
80		XWGV0006	WASHER	3	
81		XWG2	WASHER	1	
82		XUC25FP	E-RING	2	
83		XWGV3Y6G	WASHER	2	
84		XWGV2Y4G	WASHER	2	
85		XWGV5D8G	WASHER	2	
86		XWGV2Y5G	WASHER	1	
87		XXE3A5FPS	HEX-SCREW	2	
88		XXE2C6FP	HEX-SCREW	1	
89		XYNV26+K8	SCREW	2	
90		XTS26+6F	SCREW	2	
91		XWGV25Y6G	WASHER	1	

Mechanical Chassis Assembly (3)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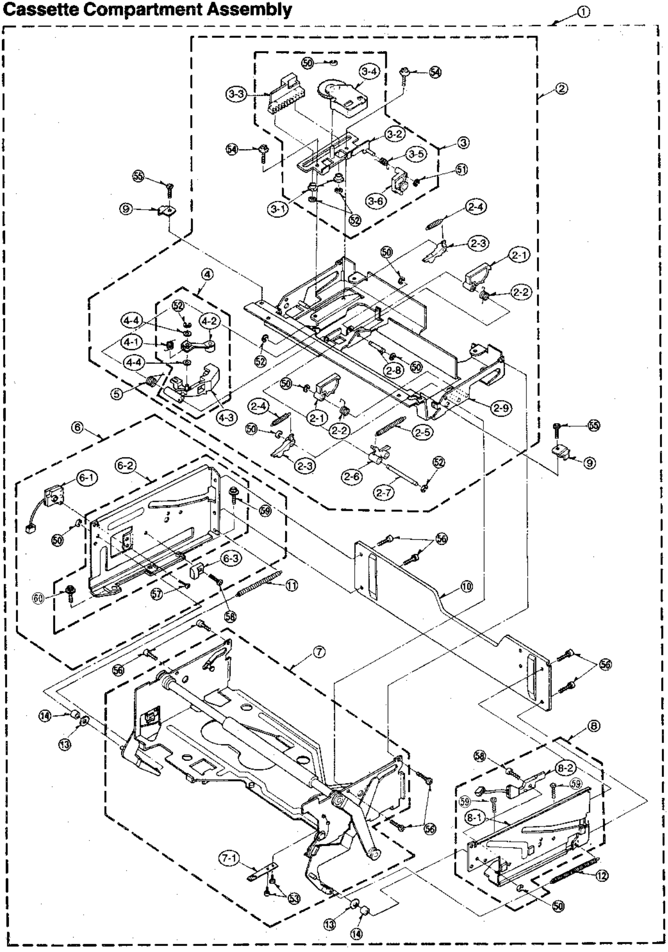
MECHANICAL CHASSIS ASSEMBLY (3)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VKK0926	SUB CHASSIS UNIT	1	
1-1		VXL1574	SUPPLY BRAKE UNIT	1	
1-2		VML2114	S.BRAKE LEVER	1	
1-3		VXA2843	S.SOLENOID BASE	1	
1-4		VXP0848	WORM GEAR (1) U	1	
1-5		VMA7039	U/D MOTOR MOUNTING PLATE	1	
1-6		VRD0029	UP DOWN MOTOR	1	
1-7		VSH0034	LEAF SW	1	
1-9		VSJ0077	SUPPLY BRAKE SOLENOID	1	
1-10		VXA2046	FG HOLDER U	1	
1-11		VMX1318	S.BRAKE PLATE SPACER	1	
1-12		VMD0621	FG SUPPORT (2)	1	
1-13		VDG0392	WORM WHEEL (1)	1	
1-14		VMX1319	KICK LEVER COLLER	2	
1-15		VXR0160	SUPPLY REEL TABLE	1	
1-16		VXR0161	TAKE-UP REEL TABLE	1	
1-17		VDG0393	INTERMIDATE GEAR (1)	1	
1-18		VDG0418	CAM GEAR (1)	1	
1-19		VMX1128	LED HOLDER (A)	1	
1-20		VMX0683	LED HOLDER (L)	1	
1-21		VXP0929	IDLER GEAR AU	1	
1-22		VXL1722	IDLER GEAR BASE U	1	
1-23		VXR0163	SMALL REEL U	1	
1-24		VMM0193	EJECT SLIDE	1	
1-25		VKA3395	EJECT LOCK	1	
1-26		VEK3610	UNLOADING DETECT PHOTO U	1	
1-27		VMA7266	IDLER GEAR STOPPER	1	
1-28		VSH0031	MICRO SW	1	
1-29		VML2116	SW KICK LEVER	1	
1-30		VMD0621	FG SUPPORT (2)	1	
1-31		VXA2847	FG HOLDER (R) U	1	
1-32		VMA7158	LARGE CASSETTE DETECT SWI	1	
1-33		VMS3611	SW PIN	1	
1-34		VMC0314	SW SPRING PLATE	1	
1-35		VEK3610	LOADING DETECT PHOTO U	1	
1-36		VMM0192	SOFT BRAKE RLEASE ROD	1	
1-37		EVQWUS002	CASSETE MODE SW (2)	1	
1-38		VMA7035	TAKE-UP SOLENOID BASE	1	
1-39		VXA2844	TAKE-UP BRAKE SOLENOID	1	
1-40		VXL1880	TAKE-UP BRAKE UNIT	1	
1-41		VSH0026	LEAF SW	3	
1-42		VXA2854	LED BASE U	1	
1-43		VMB1794	RELEASE ROD SPRING	1	
1-44		LN59NV	LED	1	
1-45		HW300B	FG SENSOR	2	
1-46		VJF0210	BIND A	1	
1-47		VXA3558	SUPPORT ANGLE U	1	
1-48		VMX1327	BEARING COLOR	1	
1-49		VSH0026	LEAF SW	2	
2		VEM0322	CAPSTAN U	1	
2-1		VBK0041	MR SENSOR	1	
60		XTV26+6F	SCREW	7	
61		XYN26+J6	SCREW	2	
62		XYN2+C3	SCREW	2	
63		XYN2+C5	SCREW	4	
65		XQN2+C2	SCREW	2	
67		XYN2+F5	SCREW	2	
68		XYNV26+K5	SCREW	3	
69		XSN2+8	SCREW	1	
70		XQN16+A3	SCREW	1	
71		XQN2+C3	SCREW	2	
72		XSN2+3	SCREW	1	
74		XYN26+F5	SCREW	5	
75		XUC2FP	E-RING	2	
76		XUC25FP	E-RING	3	
77		XUC15FP	E-RING	7	
78		XWGV2Y4G	WASHER	4	
81		XWE2	WASHER	1	
82		XWGV3D6G	WASHER	7	
84		XWC26B	E-RING	2	
85		XXE26W3FP	HEX-SCREW	1	
89		XYN26+C4	SCREW	5	
90		XTV26+10F	SCREW	1	
91		XTV26+8F	SCREW	2	
92		XYN26+C5	SCREW	10	
93		XYN2+C10	SCREW	1	
94		XYN26+K4	SCREW	1	

Cassette Compartment Assembly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CASSETTE COMPARTMENT ASSEMBLY

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1		VXA3589	CASSETTE UP U	1	
2		VXA3638	TOP PLATE U	1	
2-1		VML2279	ERROR INSERT STOPPER LEVER	2	
2-2		VMB1970	ERROR INSERT STOPPER SPRING	2	
2-3		VML2051	PRESSURE LEVER (R)	2	
2-4		VMB1616	CASSETTE PRESSURE SPRING	2	
2-5		VMB1681	PRESSURE LEVER SPRING	1	
2-6		VXL1897	PRESSURE LEVER	1	
2-7		VMS4047	CASSETTE GUIDE LEVER ANGLE	1	
2-8		VMS4048	STOP LEVER SHAFT	1	
2-9		VXA3640	TOP PLATE	1	
3		VXA3535	SLIDE GUIDE U	1	
3-1		VDP1151	SLIDE ROLLER	2	
3-2		VXA3559	SLIDE GUIDE	1	
3-3		VXA2891	SLIDE GEAR	1	
3-4		VDG0214	DUMPER	1	
3-5		VMB1953	S-CASSETTE OPENER SPRING	1	
3-6		VXL1887	S-CASSETTE OPENER	1	
4		VXL1885	S-CASSETTE GUIDE U	1	
4-1		VMB1952	S-CASSETTE LOCK SPRING	1	
4-2		VXA3641	S-CASSETTE GUIDE ROLLER ARM	1	
4-3		VXL1886	S-CASSETTE GUIDE	1	
4-4		XWGV2D4G	POLY SLIDER WASHER	2	
5		VMB1954	S-CASSETTE GUIDE SPRING	1	
6		VXA3591	SIDE PLATE (R) SU	1	
6-1		VEK3255	PHOTO HOLDER (R) U	1	
6-2		VXA3639	SIDE PLATE (R) U	1	
6-3		VMD1009	HOLDER GUIDE	1	
7		VXA3590	CASSETTE HOLDER SU	1	
7-1		VXL1863	ROCK RELEASE LEVER	1	
8		VXA3592	SIDE PLATE (L) SU	1	
8-1		VXA3560	SIDE PLATE (L) U	1	
8-2		VEK3256	PHOTO HOLDER (L) U	1	
9		VMA7903	SIDE SUPPORTER	2	
10		VMA7905	REAR PLATE	1	
11		VMB1968	UPPER SPRING (R)	1	
12		VMB1969	UPPER SPRING (L)	1	
13		XWGV3Y12G	POLY SLIDER	2	
14		VDP0967	MAIN ARM ROLLER	2	
50		XUC25FP	E-RING	7	
51		XUC2FP	E-RING	1	
52		XUC15FP	E-RING	5	
53		XQN16+A16FZ	SCREW	2	
54		XYN26+F4	SCREW	2	
55		VHD0267	SCREW	2	
56		XYN26+C4	SCREW	8	
57		XTN2+5J	SCREW	1	
58		XSN26+4	SCREW	2	
59		XTV26+6F	SCREW	3	
60		XYN26+C4	SCREW	1	

ELECTRICAL PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP80454A	P.C.BOARD W/COMPONENT	1	
			MOTHER		
		VEP86082A	P.C.BOARD W/COMPONENT	1	
			SYSCON		
		VEP86083A	P.C.BOARD W/COMPONENT	1	PART OF VEP86082A
			SYSCON SUB		
		VEP82051A	P.C.BOARD W/COMPONENT	1	
			SERVO		
		VEP82052A	P.C.BOARD W/COMPONENT	1	PART OF VEP82051A
			SERVO SUB 1		
		VEB0393A	P.C.BOARD W/COMPONENT	1	
			DECODER MAIN UNIT		
		VEP88048A	P.C.BOARD W/COMPONENT	1	PART OF VEB0393A
			DECODER MAIN		
		VEP88049A	P.C.BOARD W/COMPONENT	1	PART OF VEB0393A
			DECODER MAIN SUB 1		
		VEP83076A	P.C.BOARD W/COMPONENT	1	
			VIDEO 1		
		VEP83101A	P.C.BOARD W/COMPONENT	1	PART OF VEP83076A
			VIDEO 1 SUB 1		
		VEP83102A	P.C.BOARD W/COMPONENT	1	PART OF VEP83076A
			VIDEO 1 SUB 2		
		VEP83077A	P.C.BOARD W/COMPONENT	1	
			VIDEO 2		
		VEP83078A	P.C.BOARD W/COMPONENT	1	PART OF VEP83077A
			VIDEO 2 SUB 1		
		VEP83095A	P.C.BOARD W/COMPONENT	1	PART OF VEP83077A
			VIDEO 2 SUB 2		
		VEP80543A	P.C.BOARD W/COMPONENT	1	PART OF VEP83077A
			FILTER 1		
		VEP80543B	P.C.BOARD W/COMPONENT	1	PART OF VEP83077A
			FILTER 2		
		VEB0394A	P.C.BOARD W/COMPONENT	1	
			VIDEO 3 & 4 UNIT		
		VEP88051A	P.C.BOARD W/COMPONENT	1	PART OF VEB0394A
			VIDEO 3		
		VEP88052A	P.C.BOARD W/COMPONENT	1	PART OF VEB0394A
			VIDEO 4		
		VEP88053C	P.C.BOARD W/COMPONENT	1	PART OF VEP88052A
			VIDEO 4 SUB		
		VEB0392A	P.C.BOARD W/COMPONENT	1	
			AUDIO MAIN UNIT		
		VEP84009G	P.C.BOARD W/COMPONENT	1	PART OF VEB0392A
			AUDIO MAIN		
		VEP04164C	P.C.BOARD W/COMPONENT	1	PART OF VEB0392A
			AUDIO MAIN SUB 1		
		VEP84012C	P.C.BOARD W/COMPONENT	1	PART OF VEB0392A
			AUDIO MAIN SUB 2		
		VEP80217A	P.C.BOARD W/COMPONENT	1	PART OF VEP84009G
			AUDIO MAIN SUB 3		
		VEP84015B	P.C.BOARD W/COMPONENT	1	PART OF VEP84009G
			AUDIO MAIN SUB 4		
		VEP80218A	P.C.BOARD W/COMPONENT	1	PART OF VEP84009C
			AUDIO MAIN SUB 5		
		VEP84079A	P.C.BOARD W/COMPONENT	1	PART OF VEP84009G
			AUDIO MAIN SUB 6		
		VEP84090A	P.C.BOARD W/COMPONENT	1	PART OF VEP84009G
			AUDIO MAIN SUB 7		
		VEP84100A	P.C.BOARD W/COMPONENT	1	PART OF VEP84009G
			AUDIO MAIN SUB 8		
		VEP81016F	P.C.BOARD W/COMPONENT	1	
			POWER SUPPLY		
		VEP81039A	P.C.BOARD W/COMPONENT	1	
			POWER SUB		
		VEP86074A	P.C.BOARD W/COMPONENT	1	
			FRONT 1		
		VEP86077A	P.C.BOARD W/COMPONENT	1	
			FRONT 2		
		VEP80544A	P.C.BOARD W/COMPONENT	1	PART OF VEP86077A
			FRONT 2 SUB		
		VEP80092A	P.C.BOARD W/COMPONENT	1	
			FRONT 3		
		VEP80541A	P.C.BOARD W/COMPONENT	1	
			FRONT 4		
		VEP80199A	P.C.BOARD W/COMPONENT	1	
			HOUR METER		
		VEP80093A	P.C.BOARD W/COMPONENT	1	
			VR 1		
		VEP80094B	P.C.BOARD W/COMPONENT	1	
			VR 2		
		VEP84086B	P.C.BOARD W/COMPONENT	1	
			AUDIO INPUT		
		VEP84055B	P.C.BOARD W/COMPONENT	1	
			AUDIO MONITOR		
		VEP84056B	P.C.BOARD W/COMPONENT	1	
			AUDIO VR SUB		
		VEP80455A	P.C.BOARD W/COMPONENT	1	
			JACK PANEL		
		VEP80388A	P.C.BOARD W/COMPONENT	1	
			HEADPHONE JACK		
		VEP80125A	P.C.BOARD W/COMPONENT	1	
			JACK VR		
		VEP80126A	P.C.BOARD W/COMPONENT	1	
			POWER SELECT		
		VEP80514B	P.C.BOARD W/COMPONENT	1	
			SW INTERMEDIATE		
		VEP05088C	P.C.BOARD W/COMPONENT	1	
			PLAY HEAD AMP		
		VEP80508A	P.C.BOARD W/COMPONENT	1	
			FAN CONTROL		
		VEP80139A	P.C.BOARD W/COMPONENT	1	
			MECHANICAL INTERMEDIATE 1		
		VEP80140B	P.C.BOARD W/COMPONENT	1	
			MECHANICAL INTERMEDIATE 2		
		VEP80141A	P.C.BOARD W/COMPONENT	1	
			MECHANICAL INTERMEDIATE 3		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP80454A	P.C.BOARD W/COMPONENT		
			MOTHER		
P301		VJP1233T	CONNECTOR(MALE) 6P	1	
P302		VJP1234T	CONNECTOR(MALE) 7P	1	
P303		VJP1232R	CONNECTOR(MALE) 5P	1	
P304		VJP1233T	CONNECTOR(MALE) 6P	1	
P305		VJP1234T	CONNECTOR(MALE) 7P	1	
P306		VJP1231T	CONNECTOR(MALE) 4P	1	
P307		VJP1232T	CONNECTOR(MALE) 5P	1	
P308		VJP1236T	CONNECTOR(MALE) 9P	1	
P309		VJP1231T	CONNECTOR(MALE) 4P	1	
P310		VJP1239T	CONNECTOR(MALE) 12P	1	
P311		VJP1238T	CONNECTOR(MALE) 11P	1	
P312		VJP1239T	CONNECTOR(MALE) 12P	1	
P313		VJP1235T	CONNECTOR(MALE) 8P	1	
P315		VJP1230T	CONNECTOR(MALE) 3P	1	
V1-V3		VJP1958	CONNECTOR (MALE)	3	
			MISCELLANEOUS		
		XNG2E	NUT	6	
		XYN2+C10FZ	SCREW	6	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP86082A	P.C.BOARD W/COMPONENT		
			SYSCON		
	■	VEP86083A	P.C.BOARD W/COMPONENT		PART OF VEP86082A
			SYSCON SUB		
			CAPACITORS		
C6001-07		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	7	
C6009		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6010		ECEA1EK470	E.CAPACITOR 25V 47U	1	
C6011,12		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C6013		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C6015-22		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	8	
C6024		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6025		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6026,27		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C6028-51		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	24	
C6062		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6064,65		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C6066		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6069,70		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6071		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C6072		ECEA1CSS221	E.CAPACITOR 16V 220U	1	
C6073		ECEA1ESS101	E.CAPACITOR 25V 100U	1	
C6074		ECEA1CU222	E.CAPACITOR 16V 2200U	1	
C6075		ECEA1CSS222	E.CAPACITOR 16V 2200U	1	
C6076		ECEA1CU222	E.CAPACITOR 16V 2200U	1	
C6077,78		ECEA1HKN010	E.CAPACITOR 50V 1U	2	
C6079,80		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C6081,82		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6090		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6095,96		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6099		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C6100,01		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6102		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C6104		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6106,07		ECEA1CU222	E.CAPACITOR 16V 2200U	2	
D6001		MA151K	DIODE	1	
D6002		MA151WA	DIODE	1	
D6003		MA151K	DIODE	1	
D6005-07		MA151WK	DIODE	3	
D6015		MA153	DIODE	1	
D6016		MA151K	DIODE	1	
D6018		11ES1	DIODE	1	
D6020		11ES1	DIODE	1	
D6022		11ES1	DIODE	1	
D6023		MA4075	DIODE	1	
D6024-26		MA151K	DIODE	3	
D6030		MA4100L	DIODE	1	
D6033		MA151K	DIODE	1	
D6034-39		11ES1	DIODE	6	
IC6001		VS10376F	IC	1	
IC6002,03		UPD71055G	IC	2	
IC6004		UPD71054GB	IC	1	
IC6005		MN74HC138S	IC	1	
IC6006		MN4013BS	IC	1	
IC6007		MN74HC27S	IC	1	
IC6008		MN4050BS	IC	1	
IC6010		BA6238AU3	IC	1	
IC6011		PU3220	IC	1	
IC6013		MN4053BS	IC	1	
IC6014		MC34051M	IC	1	
IC6016,17		UPD71055G	IC	2	
IC6018		MN4050BS	IC	1	
IC6019		MN4538BS	IC	1	
IC6021-23		NJM2903M	IC	3	
IC6025		NJM2903M	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC6026		NJM2904M	IC	1	
IC6027		MN4053BS	IC	1	
IC6028		MN74HC74S	IC	1	
IC6029		NJM2904M	IC	1	
IC6030		M51951BML	IC	1	
IC6031		NJM2903M	IC	1	
IC6001S		VJS1830	CONNECTOR	1	
J6004-06		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	
L6001		VLQ0392	COIL	1	
P6401		VJP1234T	CONNECTOR(MALE) 7P	1	
P6402		VJP1237T	CONNECTOR(MALE) 10P	1	
P6403		VJP1232T	CONNECTOR(MALE) 5P	1	
P6404		VJP1236T	CONNECTOR(MALE) 9P	1	
P6405,06		VJP1235T	CONNECTOR(MALE) 8P	2	
P6407		VJP1234T	CONNECTOR(MALE) 7P	1	
P6408		VJP1237T	CONNECTOR(MALE) 10P	1	
P6409		VJP1232T	CONNECTOR(MALE) 5P	1	
P6410		VJP1239T	CONNECTOR(MALE) 12P	1	
P6411		VJP1238T	CONNECTOR(MALE) 11P	1	
P6412		VJP1231T	CONNECTOR(MALE) 4P	1	
P6413		VJP1233T	CONNECTOR(MALE) 6P	1	
P6414		VJP1235R	CONNECTOR(MALE) 8P	1	
P6415		VJP1233T	CONNECTOR(MALE) 6P	1	
P6417		VJP1239T	CONNECTOR(MALE) 12P	1	
P6418		VJP1233T	CONNECTOR(MALE) 6P	1	
P6421		VJP1597T	CONNECTOR(MALE) 4P	1	
P6422		VJP1599T	CONNECTOR(MALE) 6P	1	
P6423		VJP1230T	CONNECTOR(MALE) 3P	1	
P6431		VJP1597T	CONNECTOR(MALE) 4P	1	
P6432		VJP1599T	CONNECTOR(MALE) 6P	1	
Q6001,02		UN2213	TRANSISTOR-RESISTOR	2	
Q6004-09		2SD601	TRANSISTOR CHIP	6	(R)
Q6010-15		UN2113	TRANSISTOR-RESISTOR	6	
Q6016		UN2213	TRANSISTOR-RESISTOR	1	
Q6017,18		UN2216	TRANSISTOR	2	
Q6019		UN2213	TRANSISTOR-RESISTOR	1	
Q6020		UN2216	TRANSISTOR	1	
Q6021		UN2213	TRANSISTOR-RESISTOR	1	
Q6023		UN2213	TRANSISTOR-RESISTOR	1	
Q6024-33		UN2113	TRANSISTOR-RESISTOR	10	
Q6034		UN2212	TRANSISTOR-RESISTOR	1	
Q6035		UN2213	TRANSISTOR-RESISTOR	1	
Q6036		UN2113	TRANSISTOR-RESISTOR	1	
Q6037		2SD601	TRANSISTOR CHIP	1	(R)
Q6038-41		UN2213	TRANSISTOR-RESISTOR	4	
Q6049		2SD601	TRANSISTOR CHIP	1	(R)
Q6051		2SD601	TRANSISTOR CHIP	1	(Q.R)
Q6052		UN2213	TRANSISTOR-RESISTOR	1	
Q6054-56		2SB819	TRANSISTOR	3	(R)
Q6060		2SB1175	TRANSISTOR	1	(Q)
Q6061		UN2115	COMBINATION PARTS	1	
Q6062,63		UN2213	TRANSISTOR-RESISTOR	2	
Q6064		UN2113	TRANSISTOR-RESISTOR	1	
Q6065		UN2213	TRANSISTOR-RESISTOR	1	
Q6066		2SD601	TRANSISTOR CHIP	1	(Q,R)
Q6067		2SB710	TRANSISTOR CHIP	1	(Q.R,S)
Q6068		UN2213	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R6003		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6004		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6005		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R6008		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6009		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6010-25		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	16	
R6028		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6031-33		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	3	
R6034		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6035		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R6037-39		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	3	
R6040		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6041		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6042		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R6043		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R6044		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6045		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6046		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6048		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6050		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R6051-56		ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	6	
R6057,58		ERJ8GCYJ272	M.RESISTOR CH 1/8W 2.7K	2	
R6063,64		ERJ8GCYJ272	M.RESISTOR CH 1/8W 2.7K	2	
R6067,68		ERJ8GCYJ272	M.RESISTOR CH 1/8W 2.7K	2	
R6069,70		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	2	
R6071-78		ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	8	
R6079-05		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	27	
R6106		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6107		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6108		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R6109		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6110		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6112		ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	1	
R6113		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6115		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6116		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R6117		ERJ8GCYJ331	M.RESISTOR CH 1/8W 33K	1	
R6118		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R6119		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R6120		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6122		ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R6127		ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
R6128-30		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	3	
R6132-34		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	3	
R6135		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R6136		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6137		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R6138		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6139		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R6140		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6142,43		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	2	
R6155,56		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R6157,58		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	2	
R6159		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6160		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6161,62		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R6163		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R6164		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R6165		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6166-68		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R6169		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R6170		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6171		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R6172,73		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R6174		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6176,77		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R6178		ERJ8GCYJ471	M.RESISTOR CH 1/8W 470	1	
R6180		ERJ8GCYJ471	M.RESISTOR CH 1/8W 470	1	
R6182		ERJ8GCYJ471	M.RESISTOR CH 1/8W 470	1	
R6184		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R6185-87		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	3	
R6189		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6190		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R6191		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R6192		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R6193		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6194		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6195,96		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R6197		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6199		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6201,02		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R6203		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R6210		ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	1	
R6211		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6212		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6213		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6214		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6215		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R6216		ERJ6GEYG334	M.RESISTOR CH 1/10W 330K	1	
R6217,18		ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	2	
R6219		ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1	
R6220		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6221		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R6222,23		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R6226-28		VRE0034E104	M.RESISTOR CH 1/10W 100K	3	
R6229		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R6230		VRE0034E333	M.RESISTOR CH 1/10W 33K	1	
R6231		ERJ6GEYG824	M.RESISTOR CH 1/10W 820K	1	
R6232		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6233		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R6234		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R6235		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R6236		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R6237		ERDS1TJ820	C.RESISTOR 1/2W 82	1	
R6238,39		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R6240		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R6241		ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R6242		ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R6243		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R6244,45		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R6247		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
SW6001		VSS023708	SWITCH	1	
VR6002,03		VRV0062B103	V.RESISTOR 10K	2	
X6001		VSX0285	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJR0119	PIN	21	
		VJS2509	CONNECTOR(FEMALE)	1	
		VMS2876	PIN	4	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP82051A	P.C.BOARD W/COMPONENT		
			SERVO		
	■	VEP82052A	P.C.BOARD W/COMPONENT		PART OF VEP82051A
			SERVO SUB 1		
			CAPACITORS		
C2001,02		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C2003,04		VCK0035333KR	C.CAPACITOR 50V 0.033U	2	
C2005		ECEA1AKN220	E.CAPACITOR 10V 22U	1	
C2006		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2007-09		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C2010		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2011		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C2012		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
C2013		ECUX1H822KBN	C.CAPACITOR CH 50V 8200P	1	
C2014		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2015		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C2016,17		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C2018,19		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	2	
C2020		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2021		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C2022,23		ECUX1H561JN	C.CAPACITOR CH 50V 560P	2	
C2024-28		ECEA1CK101	E.CAPACITOR 16V 100U	5	
C2029		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2030		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C2031		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C2032		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2033		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C2034		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C2035		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2036		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C2037,38		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2	
C2039		ECUM1E273KBN	C.CAPACITOR CH 25V 0.027U	1	
C2040		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C2041		ECQM1H562JV	P.CAPACITOR 50V 5600P	1	
C2042		ECQM1H224JF	P.CAPACITOR 50V 0.22U	1	
C2043		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C2044		ECUX1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2045,46		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	2	
C2047		ECUX1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2048		ECUM1E183KBN	C.CAPACITOR CH 25V 0.018U	1	
C2049		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2050		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2051		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C2052		ECEA1HSN0R1	E.CAPACITOR 50V 0.1U	1	
C2053		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C2054		ECQM1H683JV	P.CAPACITOR 50V 0.068U	1	
C2055		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C2056		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	
C2057		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C2058		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C2059-61		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2062		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C2063		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C2064		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2065		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C2066-68		ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	3	
C2071		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2072		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2073,74		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C2075		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2076		VCK0037274KR	C.CAPACITOR 50V 0.27U	1	
C2077		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2078		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2079		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2080		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2081		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2082		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2083		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2084		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2085		ECEA1EK470	E.CAPACITOR 25V 47U	1	
C2086		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2087		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2088		ECEA1EK470	E.CAPACITOR 25V 47U	1	
C2089		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2090		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C2094,95		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C2096,97		ECEA1AKA221	E.CAPACITOR 10V 220U	2	
C2098		ECUX1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C2099		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C2100		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C2101,02		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C2103		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C2104-06		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	3	
C2107-09		ECUX1H473ZFN	C.CAPACITOR CH 50V 0.047U	3	
C2110		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2111		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2112		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C2113		ECUX1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C2114		VCK0037564KR	C.CAPACITOR 50V 0.56U	1	
C2116		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2117		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C2118		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	1	
C2119,20		ECEA1HKR22	E.CAPACITOR 50V 0.22U	2	
C2121		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C2122,23		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C2124-26		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	3	
C2127-29		ECUX1H473ZFN	C.CAPACITOR CH 50V 0.047U	3	
C2133,34		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	2	
C2136		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C2137,38		ECEA1HKR22	E.CAPACITOR 50V 0.22U	2	
C2141		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C2142		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C2143,44		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C2145,46		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C2147		VCK0037224KR	C.CAPACITOR 50V 0.22U	1	
C2148		ECEA1HKR22	E.CAPACITOR 50V 0.22U	1	
C2150		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C2156		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C2157		VCK0037224KR	C.CAPACITOR 50V 0.22U	1	
C2158		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2160		ECQM1H122JV	P.CAPACITOR 50V 1200P	1	
C2161		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C2162		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2163		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C2165		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C2166		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C2167		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C2171,72		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C2174		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2175		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C2210		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2501-03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C2504,05		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C2506		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C2507,08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
D2001		MA151K	DIODE	1	
D2002		MA153	DIODE	1	
D2003,04		MA151K	DIODE	2	
D2005		MA151WA	DIODE	1	
D2006		MA151K	DIODE	1	
D2007,08		MA151WK	DIODE	2	
D2009		MA151K	DIODE	1	
D2010		MA151WA	DIODE	1	
D2012,13		MA151K	DIODE	2	
D2014		MA151WA	DIODE	1	
D2015,16		MA153	DIODE	2	
D2017		MA151WK	DIODE	1	
D2019		MA151K	DIODE	1	
D2020		MA151WA	DIODE	1	
D2021,22		MA151WK	DIODE	2	
D2023		MA151K	DIODE	1	
D2024		MA151WA	DIODE	1	
D2025-27		MA151K	DIODE	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D2028,29		MA151WK	DIODE	2	
D2030,31		MA151K	DIODE	2	
D2032-36		MA701A	DIODE	5	
D2037		MA151WK	DIODE	1	
D2038		MA153	DIODE	1	
D2039		MA151WK	DIODE	1	
D2040		MA151K	DIODE	1	
D2050		MA151WA	DIODE	1	
D2052		MA151WK	DIODE	1	
D2053-55		MA151K	DIODE	3	
D2056.57		MA151WA	DIODE	2	
D2062,63		MA151WK	DIODE	2	
D2064		MA153	DIODE	1	
D2065		MA151WK	DIODE	1	
D2066		MA151K	DIODE	1	
D2067		MA151WK	DIODE	1	
D2068		MA151K	DIODE	1	
D2075-78		MA151K	DIODE	4	
D2079		MA151WA	DIODE	1	
D2080		MA151K	DIODE	1	
D2081		MA151WK	DIODE	1	
D2082		MA151K	DIODE	1	
D2501		MA151K	DIODE	1	
D2502		MA151WA	DIODE	1	
IC2001		UPC4558G2	IC	1	
IC2002		NJM2904M	IC	1	
IC2003		UPC4558G2	IC	1	
IC2004		UPD4049UBG	IC	1	
IC2005		BA6149LS	IC	1	
IC2006		PU4213	IC	1	
IC2007		NJM2902M	IC	1	
IC2008		NJM2903M	IC	1	
IC2009		MN4013BS	IC	1	
IC2010		MN4538BS	IC	1	
IC2012		MN4538BS	IC	1	
IC2014		NJM2904M	IC	1	
IC2017		NJM2903M	IC	1	
IC2018		NJM2904M	IC	1	
IC2023		UPD65040F155	IC	1	
IC2026		MN4538BS	IC	1	
IC2027		MN4053BS	IC	1	
IC2028,29		AN3821K	IC	2	
IC2030		NJM2902M	IC	1	
IC2031		MN74HC14S	IC	1	
IC2032		AN3620SM	IC	1	
IC2033,34		AN3830KA	IC	2	
IC2035		NJM2903M	IC	1	
IC2036		NJM2904M	IC	1	
IC2037		MN4053BS	IC	1	
IC2039		NJM2904M	IC	1	
IC2040,41		MN4028BS	IC	2	
IC2043		NJM2904M	IC	1	
IC2045		MN4028BS	IC	1	
IC2046,47		MN4053BS	IC	2	
IC2049		MN4081BS	IC	1	
IC2051		MN4053BS	IC	1	
IC2052		NJM2904M	IC	1	
IC2053		MN4051BS	IC	1	
IC2054		NJM2903M	IC	1	
IC2055		MN4538BS	IC	1	
IC2056		NJM2904M	IC	1	
IC2057		MN4053BS	IC	1	
IC2501,02		MN74HC04S	IC	2	
IC2503		MN51030VZR	IC	1	
IC2504		MN53015VZW	IC	1	
IC2506		MN4027BS	IC	1	
IC2507		MN4051BS	IC	1	
IC2508		MN4030BS	IC	1	
L2001		VLQRL05F221K	COIL 220UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L2002		VLQEL05F100J	COIL 10UH	1	
L2004		VLQEL05F221K	COIL 220UH	1	
L2005		VLQEL05F101K	COIL 100UH	1	
L2006		VLQEL05F151K	COIL 150UH	1	
L2008-11		VLQ0129	COIL 300UH	4	
L2013		VLQ0129	COIL 300UH	1	
L2014		VLQEL05F221K	COIL 220UH	1	
L2015		VLQ0128	COIL 47UH	1	
L2016,17		VLQEL05F100J	COIL 10UH	2	
L2018,19		VLQ0256	COIL	2	
P501		VJP1238T	CONNECTOR(MALE) 11P	1	
P502		VJP1231T	CONNECTOR(MALE) 4P	1	
P503		VJP1238T	CONNECTOR(MALE) 11P	1	
P504		VJP1231T	CONNECTOR(MALE) 4P	1	
P505		VJP1236T	CONNECTOR(MALE) 9P	1	
P506		VJP1231T	CONNECTOR(MALE) 4P	1	
P507		VJP1232T	CONNECTOR(MALE) 5P	1	
P508		VJP1233T	CONNECTOR(MALE) 6P	1	
P509		VJP1393T	CONNECTOR(MALE) 13P	1	
P510		VJP1237R	CONNECTOR(MALE) 10P	1	
P511		VJP1393T	CONNECTOR(MALE) 13P	1	
P513		VJP1230T	CONNECTOR(MALE) 3P	1	
P514		VJP1239T	CONNECTOR(MALE) 12P	1	
P515		VJP1238T	CONNECTOR(MALE) 11P	1	
P516		VJP1231T	CONNECTOR(MALE) 4P	1	
P517		VJP1238T	CONNECTOR(MALE) 11P	1	
P518		VJP1231T	CONNECTOR(MALE) 4P	1	
P531		VJP1244T	CONNECTOR(MALE) 4P	1	
Q2001,02		2SD601	TRANSISTOR CHIP	2	(R)
Q2003		UN2213	TRANSISTOR-RESISTOR	1	
Q2004		UN2211	TRANSISTOR-RESISTOR	1	
Q2005		2SD601	TRANSISTOR CHIP	1	(R)
Q2006		UN2213	TRANSISTOR-RESISTOR	1	
Q2008,09		2SB709	TRANSISTOR CHIP	2	(R)
Q2010		UN2113	TRANSISTOR-RESISTOR	1	
Q2013,14		UN2213	TRANSISTOR-RESISTOR	2	
Q2015,16		2SB709	TRANSISTOR CHIP	2	(R)
Q2017,18		2SD601	TRANSISTOR CHIP	2	(R)
Q2019		UN2113	TRANSISTOR-RESISTOR	1	
Q2022		UN2113	TRANSISTOR-RESISTOR	1	
Q2028,29		UN2213	TRANSISTOR-RESISTOR	2	
Q2031-36		UN2213	TRANSISTOR-RESISTOR	6	
Q2039-42		UN2213	TRANSISTOR-RESISTOR	4	
Q2045		UN2213	TRANSISTOR-RESISTOR	1	
Q2046		2SB835	TRANSISTOR	1	
Q2047,48		UN2215	TRANSISTOR-RESISTOR	2	
Q2051-57		UN2213	TRANSISTOR-RESISTOR	7	
Q2058		2SB709	TRANSISTOR CHIP	1	(R)
Q2059		UN2211	TRANSISTOR-RESISTOR	1	
Q2060		UN2213	TRANSISTOR-RESISTOR	1	
Q2061		2SD601	TRANSISTOR CHIP	1	(R)
Q2062		UN2213	TRANSISTOR-RESISTOR	1	
Q2063		2SD601	TRANSISTOR CHIP	1	(R)
Q2064		UN2213	TRANSISTOR-RESISTOR	1	
Q2070-72		UN2213	TRANSISTOR-RESISTOR	3	
Q2073		UN2113	TRANSISTOR-RESISTOR	1	
Q2501		UN2213	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R2001		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2002,03		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2004		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R2005		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2006		ERJ6GEYJ560	M.RESISTOR CH 1/10W 56	1	
R2007		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2008		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R2009		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2010		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R2011		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R2012		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2013-15		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	3	
R2016		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R2017		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2018		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R2019		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2020		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R2021		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2022		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R2023		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2024		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R2025		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R2026,27		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R2028		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2029		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R2030-32		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	3	
R2033		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2034		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2035		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2036		ERJ6GEYG242	M.RESISTOR CH 1/10W 2.4K	1	
R2037		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2038		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2039		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R2040		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2041		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2042		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R2043		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R2044,45		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R2046		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2047		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R2048		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R2049		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2050,51		VRE0034E102	M.RESISTOR CH 1/10W 1K	2	
R2052		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2053		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2054		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2055		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R2056-59		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	4	
R2060		ERJ6GEYK155	M.RESISTOR CH 1/10W 1.5M	1	
R2061		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2062		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2063		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R2064		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R2065		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2066		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2067		ERJ6GEYJ124	M.RESISTOR CH 1/10W 120K	1	
R2068,69		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R2070		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2071		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2072		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R2073		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2074		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2075,76		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R2077		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2078		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R2079		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2080		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2081		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2082		ERJ6GEYK475	M.RESISTOR CH 1/10W 4.7M	1	
R2083		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2084		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2085		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R2086,87		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R2088		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2089		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2090		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2091		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2092		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2093-95		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	3	
R2096		ERDS2TJR68	C.RESISTOR 1/4W 0.68	1	
R2097		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R2099,00		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	2	
R2101		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2102		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2103		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2104		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2105		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2106		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2107-09		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	3	
R2110		ERDS2TJR68	C.RESISTOR 1/4W 0.68	1	
R2111-16		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	6	
R2117-24		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	8	
R2125,26		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	2	
R2127		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2128		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2129		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2130		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R2132		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2133-36		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	4	
R2138		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2139		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R2140		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2141,42		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R2143		ERJ6GEYK125	M.RESISTOR CH 1/10W 1.2M	1	
R2144		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2145		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2146		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2147		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2148		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2149		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2150		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2151		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R2152-54		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R2155		ERJ6GEYK155	M.RESISTOR CH 1/10W 1.5M	1	
R2156		ERDS2TJR56	C.RESISTOR 1/4W 0.56	1	
R2157		ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R2158		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R2159		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	
R2160		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R2161		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	
R2162,63		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R2164		ERDS2TJR56	C.RESISTOR 1/4W 0.56	1	
R2165		ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R2166		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2167		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2168		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2169		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2170		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2171		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2172		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2173,74		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	2	
R2175		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2176		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2177		ERJ6GEYK155	M.RESISTOR CH 1/10W 1.5M	1	
R2178		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R2179		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2180		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R2181		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R2182-86		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	5	
R2187		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R2188		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R2189		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R2190		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R2191		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R2192,93		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	2	
R2194		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2195		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2196		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2197		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2198		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2199		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2200		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R2201,02		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	2	
R2205		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R2206		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2207		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2208		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R2211		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2212		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R2213		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R2214		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R2218		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2219		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R2220		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2221		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2222		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R2224		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R2227		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R2228		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R2229		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R2230		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R2231		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R2232,33		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R2234		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R2236		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2237		ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
R2240		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2241		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R2242		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2243		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2244		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R2245		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2246		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R2247		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2254		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2255		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2260		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R2261		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R2263		VRE0034E183	M.RESISTOR CH 1/10W 18K	1	
R2264		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R2266-68		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R2269		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R2270		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R2271		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R2272		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R2273		ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R2274		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R2276		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2277		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2278		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2279		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R2280		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2281		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R2283		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R2284		ERJ6GEYG432	M.RESISTOR CH1/10W 4.3K	1	
R2285		ERJ6GEYG112	M.RESISTOR CH 1/10W 1.1K	1	
R2286		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R2287		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R2288		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2289		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R2290		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R2291		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R2292		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2293		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2297		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2298		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R2299		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2300		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2302		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R2303		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2304,05		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R2307,08		VRE0034E273	M.RESISTOR CH 1/10W 27K	2	
R2309		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2315		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2316		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2318		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R2319		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R2320		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R2321		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2322		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2328		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R2330		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R2331		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2335		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2501-04		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	4	
R2505-08		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	4	
R2509		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R2512		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R2513		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R2514		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
SW2501-03		VJP2063	CONNECTOR (MALE)	3	
VR2001		VRV0062B503	V.RESISTOR 50K	1	
VR2002		VRV0062B203	V.RESISTOR 20K	1	
VR2003		VRV0062B103	V.RESISTOR 10K	1	
VR2004		VRV0062B500	VARIABLE RESISTOR 50	1	
VR2005		VRV0062B202	V.RESISTOR 2K	1	
VR2009		VRV0062B203	V.RESISTOR 20K	1	
X2001		VSX0126	CRYSTAL OSCILLATOR	1	
X2002		VSX0136	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJR0273	PIN	1	
		VJS1435	CONNECTOR(FEMALE)	2	
		VJS1940	CONNECTOR(FEMALE)	3	
		VMS2876	PIN	2	
		VMZ1057	BARRIER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEB0393A	P.C.BOARD W/COMPONENT		
			DECODER MAIN UNIT		
	■	VEP88048A	P.C.BOARD W/COMPONENT		PART OF VEB0393A
			DECODER MAIN		
	■	VEP88049A	P.C.BOARD W/COMPONENT		PART OF VEB0393A
			DECODER MAIN SUB 1		
			CAPACITORS		
C3101		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3102		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3103		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3104		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3105		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3106		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3107		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3108		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3110		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3111		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3112		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3113		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
C3114		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3115		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3116		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3117		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3118		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3119		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3120		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	1	
C3121.22		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3123,24		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
C3125,26		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	2	
C3127		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3128		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C3129		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3130		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3131		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3132		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3133		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3134		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3135		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3136,37		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	2	
C3138		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3139		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3140		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3141		ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C3142		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3143		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3201		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3202		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
C3204.05		ECEA1AK470	E.CAPACITOR 10V 47U	2	
C3206		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3207		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3208		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3209		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3210		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3211		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
C3212		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3213		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
C3214		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3215		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C3216		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3217		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3218		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3219,20		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	2	
C3221		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3222		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3223		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3224		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
C3225		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3226		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3227		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3228		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3229		ECEA1CK100	E.CAPACITOR 16V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3230		ECUM1E273KBN	C.CAPACITOR CH 25V 0.027U	1	
C3231		ECUM1H090DCN	C.CAPACITOR CH 50V 9OP	1	
C3232		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3234		ECUM1H020DCN	C.CAPACITOR CH 50V 2P	1	
C3235		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3236		ECUM1E273KBN	C.CAPACITOR CH 25V 0.027U	1	
C3238		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3239		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3240		ECUM1E223KBN	C.CAPACITOR CH 25V 0.023U	1	
C3301		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3302,03		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3304		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3305		ECUM1E273KBN	C.CAPACITOR CH 25V 0.027U	1	
C3306		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3307,08		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C3309		ECSF1CE105	T.CAPACITOR 16V 1U	1	
C3310		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3311		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3312,13		ECUM1E273KBN	C.CAPACITOR CH 25V 0.027U	2	
C3314		ECUM1E223KBN	C.CAPACITOR CH 25V 0.023U	1	
C3315		ECEA1AKN220	E.CAPACITOR 10V 22U	1	
C3316		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3317		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3318,19		ECEA1AK470	E.CAPACITOR 10V 47U	2	
C3320		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3321		ECUM1E273KBN	C.CAPACITOR CH 25V 0.027U	1	
C3322		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3323,24		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C3325		ECSF1CE105	T.CAPACITOR 16V 1U	1	
C3326		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3327		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3328,29		ECUM1E273KBN	C.CAPACITOR CH 25V 0.027U	2	
C3330		ECUM1E223KBN	C.CAPACITOR CH 25V 0.023U	1	
C3331		ECEA1AKN220	E.CAPACITOR 10V 22U	1	
C3332		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3333,34		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3335,36		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C3337		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3338		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3339.40		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3341		ECUM1E223KBN	C.CAPACITOR CH 25V 0.023U	1	
C3342		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3343		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3344		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3345		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3346		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3347		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3348.49		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3401		ECEA1AKA221	E.CAPACITOR 10V 220U	1	
C3402		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3403		ECEA1AKA221	E.CAPACITOR 10V 220U	1	
C3404		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3405		ECEA1AKA221	E.CAPACITOR 10V 220U	1	
C3406-11		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	6	
C3412		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3413-16		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C3501		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3502		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3503		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3504		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3505-09		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	5	
C3510		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C3511		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3512		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3513		ECUM1H010CCN	C.CAPACITOR CH 50V 1P	1	
C3514		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3515		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3516		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3517		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3518		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3519		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3520		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3521		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3522		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3523		ECEA1CK470	E.CAPACITOR 16V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3524		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3525		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3526		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3527		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3528		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3529-34		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	6	
C3535		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C3536		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3537		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3538		ECUM1H010CCN	C.CAPACITOR CH 50V 1P	1	
C3539		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3540		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3541		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3542		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3543		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3544		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3545		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3546		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3547-50		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C3551		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3552,53		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3554		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3555		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3556		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3557		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3558		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3559		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3560		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3561		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3562		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3563		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3564		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3565		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3566		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3567		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C3568		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3569		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3601		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3602		ECEA1HKS3R3	E.CAPACITOR 50V 3.3U	1	
C3603		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3604		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3605		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3606		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3607-10		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C3611		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3612		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3613		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3614		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3615		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3616		VCKC1H681JCH	C.CAPACITOR 50V 680P	1	
C3617		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3618		ECQM1H223JV	P.CAPACITOR 50V 0.022U	1	
C3619		ECQM1H103JV	P.CAPACITOR 50V 0.01U	1	
C3620		ECQM1H122JV	P.CAPACITOR 50V 1200P	1	
C3621		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3622,23		ECEA1AK470	E.CAPACITOR 10V 47U	2	
C3624,25		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3626		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3627		ECUX1H681JN	C.CAPACITOR CH 50V 680P	1	
C3628		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3629		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3630		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3631		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3632		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3633		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3634		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3635		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3636		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3637		ECUX1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3638		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3639		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3640		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3641		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3642		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3643		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3644		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3645		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C3646		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3647		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3648		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3649-52		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	4	
C3653		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
D3101		MA175WA	DIODE	1	
D3102		MA151K	DIODE	1	
D3201,02		MA151K	DIODE	2	
D3301		MA151K	DIODE	1	
D3601		MA328	DIODE	1	
D3602		1SZ51	DIODE	1	
D3603-07		MA151K	DIODE	5	
DL3201		VLD0159	DELAY	1	
FL3101		VLF0661	FILTER	1	
FL3201		VLF0710	FILTER	1	
FL3202		VLF0545	FILTER	1	
FL3301,02		VLF0711	FILTER	2	
FL3303		VLF0545	FILTER	1	
FL3501,02		ELB4H034	FILTER	2	
FL3503		VLF0656	FILTER	1	
IC3101		AN78L05	IC	1	
IC3102		MC14053BF	IC	1	
IC3103-05		NJM082BM	IC	3	
IC3106		NJM319M	IC	1	
IC3107,08		MN74HC221S	IC	2	
IC3201		MC74HC4052F	IC	1	
IC3202		MC14053BF	IC	1	
IC3203		MC74HC02F	IC	1	
IC3204		MN74HC221S	IC	1	
IC3205		CX22013	IC	1	
IC3206		MC14053BF	IC	1	
IC3301		NJM1496M	IC	1	
IC3302		MC14053BF	IC	1	
IC3303		MC74HC4052F	IC	1	
IC3304		NJM1496M	IC	1	
IC3305,06		NJM082BM	IC	2	
IC3307		MC14053BF	IC	1	
IC3308,09		NJM082BM	IC	2	
IC3310		MC74HC04F	IC	1	
IC3311		74AC74SJ	IC	1	
IC3312		MN74HC221S	IC	1	
IC3313		NJM311M	IC	1	
IC3314		MC74HC74F	IC	1	
IC3315		MC74HC00F	IC	1	
IC3316		MC74HC86F	IC	1	
IC3401		MC74HC00F	IC	1	
IC3402		MC74HC32F	IC	1	
IC3501		NE5539D	IC	1	
IC3502,03		NJM082BM	IC	2	
IC3504		CXD1175M	IC	1	
IC3505		HM63021P	IC	1	
IC3506		NE5539D	IC	1	
IC3507		NJM082BM	IC	1	
IC3508		CXD1175M	IC	1	
IC3509		HM63021P	IC	1	
IC3510		MC74HC244F	IC	1	
IC3511		HA19510	IC	1	
IC3512		AN78L05	IC	1	
IC3601		MN74HC221S	IC	1	
IC3602		HD75452P	IC	1	
IC3603		NJM319M	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC3604		NJM082BM	IC	1	
IC3605		MC14052BF	IC	1	
IC3606		MN74HC221S	IC	1	
IC3607		MC74HC00F	IC	1	
IC3608		NJM082BM	IC	1	
IC3609		MC14053BF	IC	1	
IC3610		NJM2904M	IC	1	
IC3611		AN78L05	IC	1	
IC3612		MC74HC74F	IC	1	
IC3613		MC74HC08F	IC	1	
IC3614		MC74HC32F	IC	1	
IC3615		MC74HC244F	IC	1	
IC3616		MC74HC240F	IC	1	
IC3617		VSI0395	IC	1	
IC3618		VSI0396A	IC	1	
IC3619		VSI0397	IC	1	
IC3620		MN74HC221S	IC	1	
IC3621		MC74HC14F	IC	1	
IC3622.23		SN74LS74ANS	IC	2	
IC3624		MN74HC221S	IC	1	
IC3625		MC74HC153F	IC	1	
IC3626-28		MC74HC161F	IC	3	
IC3629		MC74HC4053F	IC	1	
IC3617S		VJS2575	CONNECTOR (FEMALE)	1	
IC3618S		VJS2575	CONNECTOR (FEMALE)	1	
IC3619S		VJS2575	CONNECTOR (FEMALE)	1	
L3101,02		VLQEL05F220K	COIL 22UH	2	
L3103		VLQEL05F821J	COIL 820UH	1	
L3104,05		VLQEL05F220K	COIL 22UH	2	
L3106		VLQEL05F821J	COIL 820UH	1	
L3201,02		VLQEL05F220K	COIL 22UH	2	
L3203		VLQEL05F390J	COIL 39UH	1	
L3204-07		VLQEL05F220K	COIL 22UH	4	
L3208		VLQ0320	COIL	1	
L3209		VLQEL05F220K	COIL 22UH	1	
L3301-09		VLQEL05F220K	COIL 22UH	9	
L3501		VLP0017	COIL	1	
L3502		VLQEL05F220K	COIL 22UH	1	
L3503		VLP0017	COIL	1	
L3504,05		VLQEL05F220K	COIL 22UH	2	
L3506		VLP0017	COIL	1	
L3507		VLQEL05F220K	COIL 22UH	1	
L3508		VLP0017	COIL	1	
L3509,10		VLQEL05F220K	COIL 22UH	2	
L3511		VLF0576	FILTER	1	
L3512		VLQEL05F220K	COIL 22UH	1	
L3513		VLQEL05F560J	COIL 56UH	1	
L3514		VLQEL05F220K	COIL 22UH	1	
L3601,02		VLQEL05F220K	COIL 22UH	2	
L3603		VLP0017	COIL	1	
L3604		VLQ0301	COIL 330UH	1	
L3605		VLQ0302	COIL 3000UH	1	
L3606,07		VLQEL05F220K	COIL 22UH	2	
L3608		VLQEL05F121J	COIL 120UH	1	
L3609,10		VLQEL05F560J	COIL 56UH	2	
L3611		VLQEL05F220K	COIL 22UH	1	
L3612,13		VLQEL05F101J	COIL 100UH	2	
L3614		VLQEL05F331J	COIL 330UH	1	
P331		VJP1230T	CONNECTOR(MALE) 3P	1	
P332		VJP1235T	CONNECTOR(MALE) 8P	1	
P333		VJP1233T	CONNECTOR(MALE) 6P	1	
P334		VJP1238T	CONNECTOR(MALE) 11P	1	
P335		VJP1233R	CONNECTOR(MALE) 6P	1	
P336		VJP1234T	CONNECTOR(MALE) 7P	1	
Q3101		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3102,03		2SD601	TRANSISTOR CHIP	2	(R)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q3104,05		2SC2295	TRANSISTOR CHIP	2	(B,C)
Q3106,07		2SA1022	TRANSISTOR CHIP	2	(B,C)
Q3108		2SD601	TRANSISTOR CHIP	1	(R)
Q3109,10		2SA1022	TRANSISTOR CHIP	2	(B,C)
Q3111,12		2SC2404	TRANSISTOR CHIP	2	(D)
Q3113		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3114		2SD601	TRANSISTOR CHIP	1	(R)
Q3115		2SK374	TRANSISTOR	1	
Q3116,17		2SB709	TRANSISTOR CHIP	2	(R)
Q3118		2SD601	TRANSISTOR CHIP	1	(R)
Q3119		2SK374	TRANSISTOR	1	
Q3120,21		2SB709	TRANSISTOR CHIP	2	(R)
Q3122		2SD601	TRANSISTOR CHIP	1	(R)
Q3201		2SC2404	TRANSISTOR CHIP	1	(D)
Q3202		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3203,04		2SC2404	TRANSISTOR CHIP	2	(D)
Q3205-07		2SD601	TRANSISTOR CHIP	3	(R)
Q3208,09		2SA1022	TRANSISTOR CHIP	2	(B,C)
Q3210		2SC2404	TRANSISTOR CHIP	1	(D)
Q3211		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3212		2SB709	TRANSISTOR CHIP	1	(R)
Q3213-15		2SD601	TRANSISTOR CHIP	3	(R)
Q3216		2SC2404	TRANSISTOR CHIP	1	(D)
Q3217		2SB709	TRANSISTOR CHIP	1	(R)
Q3218		2SD601	TRANSISTOR CHIP	1	(R)
Q3219		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3220		2SC2404	TRANSISTOR CHIP	1	(D)
Q3221		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3222		2SD601	TRANSISTOR CHIP	1	(R)
Q3223		2SC2404	TRANSISTOR CHIP	1	(D)
Q3224		2SD601	TRANSISTOR CHIP	1	(R)
Q3225		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3301-03		2SC2404	TRANSISTOR CHIP	3	(D)
Q3304		2SD601	TRANSISTOR CHIP	1	(R)
Q3305		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3306		2SD601	TRANSISTOR CHIP	1	(R)
Q3307		2SC2404	TRANSISTOR CHIP	1	(D)
Q3308		2SD601	TRANSISTOR CHIP	1	(R)
Q3309		2SB709	TRANSISTOR CHIP	1	(R)
Q3310-12		2SC2404	TRANSISTOR CHIP	3	(D)
Q3313		2SD601	TRANSISTOR CHIP	1	(R)
Q3314		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3315		2SD601	TRANSISTOR CHIP	1	(R)
Q3316		2SC2404	TRANSISTOR CHIP	1	(D)
Q3317		2SD601	TRANSISTOR CHIP	1	(R)
Q3318		2SB709	TRANSISTOR CHIP	1	(R)
Q3319.20		2SD601	TRANSISTOR CHIP	2	(R)
Q3401		2SB967	TRANSISTOR	1	
Q3402		2SD1295	TRANSISTOR	1	
Q3403		2SB967	TRANSISTOR	1	
Q3404		UN2213	TRANSISTOR-RESISTOR	1	
Q3405		2SB709	TRANSISTOR CHIP	1	(R)
Q3406-08		UN2213	TRANSISTOR-RESISTOR	3	
Q3501		2SD601	TRANSISTOR CHIP	1	(R)
Q3502		2SK374	TRANSISTOR	1	
Q3503		2SB709	TRANSISTOR CHIP	1	(R)
Q3504		2SD601	TRANSISTOR CHIP	1	(R)
Q3505		2SK374	TRANSISTOR	1	
Q3506		2SB709	TRANSISTOR CHIP	1	(R)
Q3507,08		2SD601	TRANSISTOR CHIP	2	(R)
Q3509		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3510		2SD601	TRANSISTOR CHIP	1	(R)
Q3511,12		2SC2404	TRANSISTOR CHIP	2	(D)
Q3513		2SB709	TRANSISTOR CHIP	1	(R)
Q3601-06		2SD601	TRANSISTOR CHIP	6	(R)
			RESISTORS		
R3101		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3102		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R3103		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3104,05		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R3106,07		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3108		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3109		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3110		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3111		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3112,13		ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	2	
R3114		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3115,16		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3117,18		VRE0034E301	M.RESISTOR CH 1/10W 300	2	
R3119,20		ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	2	
R3121		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3122		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3123		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3124		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3125		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3126.27		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R3128		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3129		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3130		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R3131		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3132		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3133		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3134-36		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	3	
R3137		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3138		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3139		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3140		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3141		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3142		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3143,44		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3145		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3146		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3147		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3148		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3149		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R3150		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3151		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3152		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3153		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3154,55		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3156,57		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R3158		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3159		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3160		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3161		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3162		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R3163		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3164		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3165		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3166		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3167		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R3168,69		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R3170,71		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3172		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3173		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3174		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3175		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3176		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3177		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3201		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3202		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3203,04		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3205		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3206		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3207		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3208		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R3209		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3210		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3211,12		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3213		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3214		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3215		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3216		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3217		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3218		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3219		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3220		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3221		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3222		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3223,24		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3225		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3226		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3227		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3228,29		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3230		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3231		VRE0034E751	M.RESISTOR CH 1/10W 750	1	
R3232		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3233		VRE0034E152	M.RESISTOR CH 1/10W 1.5K	1	
R3234		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3235		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3236		VRE0034E562	M.RESISTOR CH 1/10W 5.6K	1	
R3237,38		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3239		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3240		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3241		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3242		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3243		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3244		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3245		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3246		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3247		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3248		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3249		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3250,51		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3252		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3253,54		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3255		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3256,57		VRE0034E201	M.RESISTOR CH 1/10W 200	2	
R3258		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3259,60		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3261		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3262		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3263		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3264,65		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3266		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3267		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3268		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R3270		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3271		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3301		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R3302		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3303		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3304		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3305		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3306		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3307		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3308		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3309		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3310		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3311-13		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R3314		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3315		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3316		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3317		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3318		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3319,20		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R3321		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3322		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3323		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3324		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3325,26		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3327		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3328		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3329		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3330,31		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3332		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R3333		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3334		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3335		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3336		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3337		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3338		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3339		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3340		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3341		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3342		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3343,44		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3345		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3346		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3347		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3348		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3349,50		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R3351		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3352		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3353		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3354		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3355,56		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3357		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3358		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3359		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3360		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3361		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3362		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3363		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3364		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3365		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3366		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3367		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3368		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3369		ERJ6GEYJ124	M.RESISTOR CH 1/10W 120K	1	
R3370		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3371		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3372		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R3373		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R3374,75		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R3376		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3377		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3378		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3379,80		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3381		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3382		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3383		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3384		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3385		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3386,87		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3388		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3389		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3390		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R3391		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3392		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3401-03		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	3	
R3404		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3405		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3406		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3407		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R3408		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3409-12		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	4	
R3413		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3501		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R3502		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3503		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3504		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3505		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3506		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R3507		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3508		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3509,10		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3511		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3512		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3513		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3514		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3515		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R3516		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3517		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3518,19		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R3520		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R3521		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3522		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3523		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3524		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3525		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3526		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R3527		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3528		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3529,30		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3531		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3532		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3533		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3534		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R3535		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3536		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3537-44		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	8	
R3545		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3546		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3547		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3548		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R3549,50		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3551		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3552		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3553		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3554		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3555,56		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3557		VRB0034E301	M.RESISTOR CH 1/10W 300	1	
R3558		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3559		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3560,61		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3562		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3563		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3564		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3601		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3602		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3603		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R3604		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3605		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3606		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3607		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R3608		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3609		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3610		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3611		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3612		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3613		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3614		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3615		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R3616		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3617		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3618		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3619		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3620		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3621		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3622		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3623		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3624		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3625		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3626		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3627-29		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R3630		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3631		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3632		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3633		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3634		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3635		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3636		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3637,38		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3639		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3640		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3641		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3642		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3643		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3644		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3645		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3646-48		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3649		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3650		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
SW3201		VJP1940	CONNECTOR SWITCH	1	
SW3301-04		VJP1940	CONNECTOR SWITCH	4	
SW3601-04		VJP1940	CONNECTOR SWITCH	4	
SW3201S		VJS1940	CONNECTOR SWITCH	1	
SW3301S		VJS1940	CONNECTOR SWITCH	1	
SW3303S		VJS1940	CONNECTOR SWITCH	1	
SW3601S		VJS1940	CONNECTOR SWITCH	1	
SW3602S		VJS1940	CONNECTOR SWITCH	1	
SW3603S		VJS1940	CONNECTOR SWITCH	1	
SW3604S		VJS1940	CONNECTOR SWITCH	1	
VR3101		VRV0109B102	V.RESISTOR 1K	1	
VR3102		VRV0109B502	V.RESISTOR 5K	1	
VR3103		VRV0109B503	V.RESISTOR 50K	1	
VR3201		VRV0109B103	V.RESISTOR 10K	1	
VR3202		VRV0109B202	V.RESISTOR 2K	1	
VR3203		VRV0109B103	V.RESISTOR 10K	1	
VR3204		VRV0109B502	V.RESISTOR 5K	1	
VR3205		VRV0109B202	V.RESISTOR 2K	1	
VR3206		VRV0109B102	V.RESISTOR 1K	1	
VR3207,08		VRV0109B202	V.RESISTOR 2K	2	
VR3301		VRV0109B203	V.RESISTOR 20K	1	
VR3302		VRV0109B202	V.RESISTOR 2K	1	
VR3303		VRV0109B502	V.RESISTOR 5K	1	
VR3304		VRV0109B203	V.RESISTOR 20K	1	
VR3305		VRV0109B202	V.RESISTOR 2K	1	
VR3306,07		VRV0109B502	V.RESISTOR 5K	2	
VR3308		VRV0109B203	V.RESISTOR 20K	1	
VR3501		VRV0109B501	V.RESISTOR 500	1	
VR3502		VRV0109B102	V.RESISTOR 1K	1	
VR3503		VRV0109B501	V.RESISTOR 500	1	
VR3504-06		VRV0109B102	V.RESISTOR 1K	3	
VR3601-06		VRV0109B502	V.RESISTOR 5K	6	
VR3607,08		VRV0109B103	V.RESISTOR 10K	2	
VR3609		VRV0109B102	V.RESISTOR 1K	1	
VR3610		VRV0109B103	V.RESISTOR 10K	1	
VR3611		VRV0109B102	V.RESISTOR 1K	1	
VR3612		VRV0109B103	V.RESISTOR 10K	1	
X3301		VSX0270	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJS1435	CONNECTOR(FEMALE)	2	
		VSC1991	SHIELD CASE	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP83076A	P.C.BOARD W/COMPONENT VIDEO 1		
	■	VEP83101A	P.C.BOARD W/COMPONENT VIDEO 1 SUB 1		PART OF VEP83076A
	■	VEP83102A	P.C.BOARD W/COMPONENT VIDEO 1 SUB 2		PART OF VEP83076A
			CAPACITORS		
C1		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	PART OF VEP83102A
C1		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	PART OF VEP83101A
C3001		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3002		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3003		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3004		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3005		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3006		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3007		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3009		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3010		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3012		VCM0028	M.CAPACITOR	1	
C3013		VCM0027	M.CAPACITOR	1	
C3014		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3015		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C3016		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3017		VCM0025	M.CAPACITOR 1800P	1	
C3018		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3019		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3020		ECUM1H270JUN	C.CAPACITOR CH 50V 27P	1	
C3022		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C3023		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3024		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3025		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3026		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3027		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3028-31		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C3033		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3034		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3035		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3036,37		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3038		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3039		ECUM1E563KBM	C.CAPACITOR CH 25V 0.056U	1	
C3040		VCK0036104KR	C.CAPACITOR 50V 0.1U	1	
C3041		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3042		ECUX1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3043		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3044,45		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	2	
C3046		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3047		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3048,49		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3050		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3051-54		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C3055		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3056		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3057		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3058		ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C3059		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3060		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3061		ECEA1VKN2R2	E.CAPACITOR 35V 2.2U	1	
C3062		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3063,64		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3065		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3066		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3067		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3068		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3069		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3070		VCK0035683KR	C.CAPACITOR 50V 0.068U	1	
C3071		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3072		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3073		ECUX1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3074		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3075		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3076		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3077		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3078		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3079		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3081		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C3082		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3083		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3084		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3085		VCM0028	M.CAPACITOR	1	
C3086		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3087		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3088		VCM0027	M.CAPACITOR	1	
C3089		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C3090		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3091		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3092		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3093		VCM0029	M.CAPACITOR	1	
C3094		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3095		ECUM1H220JUN	C.CAPACITOR CH 50V 22P	1	
C3096		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3097		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3098		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3099,00		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C3101		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3102-05		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C3106,07		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C3108		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3109		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3110		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3111,12		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3113		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3114-16		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3117		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3118		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3119		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3120		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3121,22		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3123		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3124-26		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3127		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3128-30		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3131		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3132		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3133		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3134		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3135,36		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C3137		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3138		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3139-42		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C3143		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3144-47		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C3148		ECUM1H080DCN	C.CAPACITOR CH 50V 80P	1	
C3149		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C3150		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3152		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3153		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3154		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3155		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3156		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3157-59		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3160		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3161		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3162		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3163		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3164		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3165		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C3166		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3167		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3168-71		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C3172		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3173-75		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3176		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3177		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3178		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3179,80		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3181		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3182		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3183		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3184,85		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3187		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3188		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3189		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3190		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3191		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3192		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3193		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3194		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3195		ECCF1H070DC	C.CAPACITOR 50V 7P	1	
D3001		MA151K	DIODE	1	
D3002		MA153	DIODE	1	
D3003		MA151WA	DIODE	1	
FL3001.02		ELB5F100	FILTER	2	
FL3003		ELB4M042	FILTER	1	
FL3004		ELB4M043	FILTER	1	
FL3005		ELB4L053	FILTER	1	
IC3001		VCR0154	IC	1	
IC3002		VCR0153	IC	1	
IC3003		AN6306S	IC	1	
IC3004		AN78L05	IC	1	
IC3005		NJM082BM	IC	1	
IC3006		NJM319M	IC	1	
IC3007		MN74HC221S	IC	1	
IC3008		MN4013BS	IC	1	
IC3009		MN74HC221S	IC	1	
IC3010		MN4053BS	IC	1	
IC3011,12		NJM082BM	IC	2	
IC3013		AN6308S	IC	1	
IC3014		VCR0154	IC	1	
IC3015		VCR0153	IC	1	
IC3016		AN6306S	IC	1	
IC3017		AN78L05	IC	1	
IC3018		AN6308S	IC	1	
IC3019-22		VCR0159	IC	4	
IC3023,24		AN6330	IC	2	
L42		VLQEL05F1R2J	COIL 1.2UH	1	
L43		VLQEL05F1R5J	COIL 1.5H	1	
L3001,02		VLQEL05F221K	COIL 220UH	2	
L3003,04		VLQEL06F221K	COIL 220UH	2	
L3005		VLQEL05F1R0H	PEAKING COIL 1UH	1	
L3006-15		VLQEL05F221K	COIL 220UH	10	
L3016,17		VLQEL06F221K	COIL 220UH	2	
L3018		VLQEL05F1R5J	COIL 1.5H	1	
L3019,20		VLQEL05F221K	COIL 220UH	2	
L3021		VLQEL05F820J	COIL 82UH	1	
L3022		VLQEL05F821J	COIL 820UH	1	
L3023-26		VLQEL05F101K	COIL 100UH	4	
L3027-30		VLQEL06F271K	COIL 270UH	4	
L3031-33		VLQEL05F101K	COIL 100UH	3	
L3034		VLQEL05F6R8J	COIL 6.8UH	1	
L3035-37		VLQEL05F101K	COIL 100UH	3	
L3038		VLQEL05F6R8J	COIL 6.8UH	1	
L3039		VLQEL05F151J	COIL 150UH	1	
L3040,41		VLQEL05F221K	COIL 220UH	2	
P371.72		VJP1233T	CONNECTOR(MALE) 6P	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q3001		2SD601	TRANSISTOR CHIP	1	(R)
Q3002		2SB709	TRANSISTOR CHIP	1	(R)
Q3003-07		2SA1226	TRANSISTOR	5	
Q3008-12		2SC2295	TRANSISTOR CHIP	5	(B,C)
Q3013		2SD601	TRANSISTOR CHIP	1	(R)
Q3014		2SK198	TRANSISTOR CHIP	1	(Q)
Q3015		2SD601	TRANSISTOR CHIP	1	(R)
Q3016		2SB709	TRANSISTOR CHIP	1	(R)
Q3017,18		2SD601	TRANSISTOR CHIP	2	(R)
Q3019		2SK198	TRANSISTOR CHIP	1	(Q)
Q3020		UN2215	TRANSISTOR-RESISTOR	1	
Q3021		2SD1328	TRANSISTOR CHIP	1	
Q3022		2SB709	TRANSISTOR CHIP	1	(R)
Q3023		2SB766	TRANSISTOR CHIP	1	(Q,R)
Q3024.25		UN2217	TRANSISTOR-RESISTOR	2	
Q3026,27		2SD601	TRANSISTOR CHIP	2	(R)
Q3028		2SB709	TRANSISTOR CHIP	1	(R)
Q3029-31		2SC2480	TRANSISTOR	3	(R,S)
Q3032-38		2SC2295	TRANSISTOR CHIP	7	(B,C)
Q3039		2SD601	TRANSISTOR CHIP	1	(R)
Q3040		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3041		UN2213	TRANSISTOR-RESISTOR	1	
Q3042,43		2SC2851	TRANSISTOR	2	
Q3044		2SC3326	TRANSISTOR	1	(B,T,R)
Q3045		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3046		UN2213	TRANSISTOR-RESISTOR	1	
Q3047,48		2SC2851	TRANSISTOR	2	
Q3049		2SC3326	TRANSISTOR	1	(B,T,R)
Q3050		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3051		UN2213	TRANSISTOR-RESISTOR	1	
Q3052.53		2SC2851	TRANSISTOR	2	
Q3054		2SC3326	TRANSISTOR	1	(B,T,R)
Q3055		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3056		UN2213	TRANSISTOR-RESISTOR	1	
Q3057,58		2SC2851	TRANSISTOR	2	
Q3059		2SC3326	TRANSISTOR	1	(B,T,R)
Q3060		2SD1328	TRANSISTOR CHIP	1	
Q3061		2SC3356	TRANSISTOR	1	
Q3062		2SC3704	TRANSISTOR	1	
Q3063		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3064		2SD1328	TRANSISTOR CHIP	1	
Q3065		2SC3356	TRANSISTOR	1	
Q3066		2SC3704	TRANSISTOR	1	
Q3067-69		2SC2295	TRANSISTOR CHIP	3	(B,C)
Q3070		2SD601	TRANSISTOR CHIP	1	(R)
Q3073		UN2213	TRANSISTOR-RESISTOR	1	
Q3074		2SB779	TRANSISTOR CHIP	1	(R)
Q3075		UN2215	TRANSISTOR-RESISTOR	1	
Q3076		2SD601	TRANSISTOR CHIP	1	(R)
Q3077		UN2215	TRANSISTOR-RESISTOR	1	
Q3078		2SD601	TRANSISTOR CHIP	1	(R)
Q3079,80		2SD1328	TRANSISTOR CHIP	2	
Q3081		2SB779	TRANSISTOR CHIP	1	(R)
Q3082		2SB709	TRANSISTOR CHIP	1	(R)
Q3083		2SD1328	TRANSISTOR CHIP	1	
Q3084		2SC3356	TRANSISTOR	1	
Q3085		2SC3704	TRANSISTOR	1	
Q3086		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3087		2SD1328	TRANSISTOR CHIP	1	
Q3088		2SC3356	TRANSISTOR	1	
Q3089		2SC3704	TRANSISTOR	1	
Q3090-92		2SC2295	TRANSISTOR CHIP	3	(B,C)
Q3093,94		2SD601	TRANSISTOR CHIP	2	(R)
Q3097		2SD601	TRANSISTOR CHIP	1	(R)
Q3098		2SC2404	TRANSISTOR CHIP	1	(D)
Q3099,00		2SD601	TRANSISTOR CHIP	2	(R)
Q3101		2SC2404	TRANSISTOR CHIP	1	(D)
Q3102		2SD601	TRANSISTOR CHIP	1	(R)
			RESISTORS		
R1		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	PART OF VEP83101A

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	PART OF VEPB3102A
R2		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3001		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3002		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3003		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3004,05		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R3006		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3007		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3008		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3009		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3010		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3011		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3012		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3013		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3014		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3015		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R3016		VRE0034E42A	M.RESISTOR CH 1/10W 267	1	
R3017		VRE0034E82A	M.RESISTOR CH 1/10W 698	1	
R3018		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3019		VRE0034E89A	M.RESISTOR CH 1/10W 825	1	
R3020		VRE0034E26A	M.RESISTOR CH 1/10W 182	1	
R3021		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3022		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3023,24		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3025,26		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3027		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3029		ERJ6GEYG682	M.REISITOR CH 1/10W 6.8K	1	
R3030		ERN55EC2130	M.RESISTOR 1/8W 213	1	
R3031		ERN55EC5300	M.RESISTOR 1/8W 530	1	
R3032		ERJ6GEYK5R6	M.RESISTOR CH 1/10W 5.6K	1	
R3033		VRE006610822	M.RESISTOR CH 1/10W 8.2K	1	
R3034		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R3036		VRE0034E102	M.RESISTOR CH 1/10W 1K	1	
R3037,38		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R3039		VRE006645820	M.RESISTOR CH 1/10W 82	1	
R3040		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3041		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3042		ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	1	
R3043		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3044		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3045		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3046		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3048		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3049		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3050		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3051		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3052		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3053		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3054		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3055		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	
R3056		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3057		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R3058		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3059		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3060		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3061,62		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3063		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R3064		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R3065		ERJ6GEYJ225	M.RESISTOR CH1/10W 2.2M	1	
R3066		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3067		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3068		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3069		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3070		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3071		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3072		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3073		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R3074		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3075		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R3076		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3077,78		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	2	
R3079		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3080		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3081		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3082		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3083		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3084		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3085		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3086		ERJ6GEYJ270	M.RESISTOR CH 1/10W 27	1	
R3087		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R3088		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R3089		ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R3090		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3091		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3092		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3093		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3094		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3095		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3096		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3097		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3098		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3099		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3100		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R3101		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3102		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R3103		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R3104		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3105		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3106		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3107		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3108		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3109		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3110		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3111		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3112		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3113		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3114		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3115,16		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R3117		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3118		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3119		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3120		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3121		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3122		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3123		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3124		VRE0034E42A	M.RESISTOR CH 1/10W 267	1	
R3125		VRE0034E82A	M.RESISTOR CH 1/10W 698	1	
R3126		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3127		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3128		VRE0034E89A	M.RESISTOR CH 1/10W 825	1	
R3129		VRE0034E26A	M.RESISTOR CH 1/10W 182	1	
R3130		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3131.32		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	2	
R3133		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3135		ERJ6GEYG682	M.REISITOR CH 1/10W 6.8K	1	
R3136		ERN55EC2130	M.RESISTOR 1/8W 213	1	
R3137		ERN55EC5300	M.RESISTOR 1/8W 530	1	
R3138		VRE0034E102	M.RESISTOR CH 1/10W 1K	1	
R3139		VRE006607103	M.RESISTOR CH 1/10W 10K	1	
R3140		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3141		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3142		VRE006639680	M.RESISTOR CH 1/10W 68	1	
R3143		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R3144		VRE006639680	M.RESISTOR CH 1/10W 68	1	
R3145		ERJ6GEYJ184	M.RESISTOR CH 1/10W 180K	1	
R3146		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3147		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3148		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3149		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3150		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R3151		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3152		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3153		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3154-56		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R3157		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3158		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3159		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3160		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3161		ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R3162		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3163		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3164		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3165		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3166,67		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	2	
R3168		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	
R3169		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3170		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3171		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3172		ERJ6GEYJ270	M.RESISTOR CH 1/10W 27	1	
R3173		ERJ6GEYK5R6	M.RESISTOR CH 1/10W 5.6K	1	
R3174		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3175		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3176		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3177		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3178		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3179,80		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3181,82		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3183		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3184,85		ERJ8GCYJ330	M.RESISTOR CH 1/8W 33	2	
R3186		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3187		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3188		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3189		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3190		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3191,92		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3193,94		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3195		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3196,97		ERJ8GCYJ330	M.RESISTOR CH 1/8W 33	2	
R3198		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3199		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3200		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3201		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3202		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3203		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3204,05		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3206,07		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3208		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3209,10		ERJ8GCYJ330	M.RESISTOR CH 1/8W 33	2	
R3211,12		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3213,14		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3215		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3216		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3217		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3218,19		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3220,21		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3222		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3223,24		ERJ8GCYJ330	M.RESISTOR CH 1/8W 33	2	
R3225		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3226		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3227		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3228		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3229		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3230		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3231		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3232		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3233		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3234		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3235		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3236		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3237		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3238		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3239		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3240,41		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3242		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3243		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R3244		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3245		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3246		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R3247		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3248		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3249		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3250		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3251		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3254		ERJ6GEYJ270	M.RESISTOR CH 1/10W 27	1	
R3255		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3256		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3257		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3258		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3259		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3260		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3261		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3262		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3263		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3264		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3265		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3266		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3267		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3268		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3269		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3270		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3271,72		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3273,74		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R3275		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3276		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3277,78		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3279,80		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3281		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3282		ERJ6GEYJ270	M.RESISTOR CH 1/10W 27	1	
R3283		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3285		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3286		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3287		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3288		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3289		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3290		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3291		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3292		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3293		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3294-96		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R3297,98		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3299		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3300		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3301,02		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3303,04		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3305		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3306		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3307		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3308,09		ERJ6GEYJ270	M.RESISTOR CH 1/10W 27	2	
R3310,11		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	2	
R3312		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3313		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3314,15		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	2	
R3316		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3317		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3318		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3319		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3320		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3322		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3323		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R3324		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
S3001		VJS1958	CONNECTOR(FEMALE)	1	
T3001,02		EIR7QE013B	TRANSFORMER	2	
T3003,04		EIR7QE008B	TRANSFORMER	2	
T3005,06		EIR7QE013B	TRANSFORMER	2	
T3007,08		EIR7QE008B	TRANSFORMER	2	
TH3001,02		ERTD2FIL154S	THERMISTOR 150K	2	S
VR3001		VRV0109B203	V.RESISTOR 20K	1	
VR3002,03		VRV0109B102	V.RESISTOR 1K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
VR3004		VRV0109B502	V.RESISTOR 5K	1	
VR3005		VRV0109B203	V.RESISTOR 20K	1	
VR3006		VRV0109B104	V.RESISTOR 100K	1	
VR3007,08		VRV0109B203	V.RESISTOR 20K	2	
VR3009		VRV0109B103	V.RESISTOR 10K	1	
VR3010,11		VRV0109B501	V.RESISTOR 500	2	
VR3012		VRV0109B102	V.RESISTOR 1K	1	
VR3013		VRV0109B104	V.RESISTOR 100K	1	
VR3014		VRV0109B203	V.RESISTOR 20K	2	
VR3015		VRV0109B502	V.RESISTOR 5K	1	
VR3016,17		VRV0110B202	V.RESISTOR 2K	2	
VR3018,19		VRV0109B501	V.RESISTOR 500	2	
VR3020,21		VRV0110B501	V.RESISTOR 500	2	
VR3022,23		VRV0110B202	V.RESISTOR 2K	2	
VR3024-27		VRV0109B501	V.RESISTOR 500	4	
VR3028,29		VRV0109B202	V.RESISTOR 2K	2	
VR3030		VRV0109B501	V.RESISTOR 500	1	
VR3031		VRV0109B203	V.RESISTOR 20K	1	
			MISCELLANEOUS		
		VJF0456	CLAMPER	1	
		VJR0421	PIN	5	
		VMP1149	P.C.B.HOLDER ANGLE	1	
		VSC1962	SHIELD CASE	1	
		VSC1994	SHIELD CASE	2	
		VSC1995	SHIELD CASE	1	
		VSC2154	SHIELD CASE	2	
		XNG2E	NUT	2	
		XTV3+6F	SCREW	3	
		XYN2+C6FZ	SCREW	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP83077A	P.C.BOARD W/COMPONENT		
			VIDEO 2		
	■	VEP83078A	P.C.BOARD W/COMPONENT		PART OF VEP83077A
			VIDEO 2 SUB 1		
	■	VEP83095A	P.C.BOARD W/COMPONENT		PART OF VEP83077A
			VIDEO 2 SUB 2		
	■	VEP80543A	P.C.BOARD W/COMPONENT		PART OF VEP83077A
			FILTER 1		
	■	VEP80543B	P.C.BOARD W/COMPONENT		PART OF VEP83077A
			FILTER 2		
			CAPACITORS		
C1		ECUM1H121JN	C.CAPACITOR CH 50V 120P	1	PART OF VEP83095A
C1		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	PART OF VEP83078A
C2		ECUM1H020DCN	C.CAPACITOR CH 50V 2P	1	
C3001		VCK0036104KR	C.CAPACITOR 50V 0.1U	1	
C3002		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3003		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3004-06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3007,08		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3009		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3010		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3012		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3013		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3014		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3015		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3016		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3017		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3018		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3019,20		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3021		ECUX1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3022		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3023		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3024		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3025		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3026		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3027-29		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C3030,31		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3032		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3033-36		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C3037		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C3038		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3039		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3043		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3044,45		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3046		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3047-50		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C3051,52		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	2	
C3053		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3054		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3055		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3056		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3057		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3058		VCM0025	M.CAPACITOR 1800P	1	
C3059		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3060		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3062		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3063		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3064		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3065		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3066		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3067		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3068		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3069		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3070,71		VCM0027	M.CAPACITOR	2	
C3072		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3073		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3076		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3077		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3078		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3083		ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3084		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3085		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3086		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3087		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3088		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3089-91		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C3092		VCK0035683KR	C.CAPACITOR 50V 0.068U	1	
C3093		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3094		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3095		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3096		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3097		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3098		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3099		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3100		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3101		VCK0035393KR	C.CAPACITOR 50V 0.039U	1	
C3102		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3103,04		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3105,06		ECUX1H681JN	C.CAPACITOR CH 50V 680P	2	
C3107		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3108		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3109		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C3110		VCK0035K104KR	C.CAPACITOR 50V 0.1U	1	
C3111-14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C3115		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3116,17		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3118		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3119		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3120		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3121,22		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C3123,24		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3125		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3126		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3127		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3128,29		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3130		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3131		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3132		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3133		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3134-36		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C3137		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3138		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3139		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3140		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3141		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3142		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3143		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C3144,45		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3146		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3147		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3148		ECEA1AKS470	E.CAPACITOR 10V 47U	1	
C3149		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3150		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C3151		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3152		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3153		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C3154,55		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C3156		VCM0029	M.CAPACITOR	1	
C3157		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3158		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3159		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3160		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C3161		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3162		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3163		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3164		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3165		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3166		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3167		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3168		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3169,70		VCM0027	M.CAPACITOR	2	
C3171		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3174		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3175		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3176		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3183		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3184		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3185		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3186		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3187		ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C3188		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3189		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3190-92		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C3193		VCK0035683KR	C.CAPACITOR 50V 0.068U	1	
C3194		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3195		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3196		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3197		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3198		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3199		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3200		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3201		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3202		VCK0035393KR	C.CAPACITOR 50V 0.039U	1	
C3203		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3204,05		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3206,07		ECUX1H681JN	C.CAPACITOR CH 50V 680P	2	
C3208		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3209		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3210		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C3211		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3212		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3213		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3214		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3215		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3216		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3223		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3224		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3225		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C3226		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3227		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3228		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3230		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3235		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3239		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3250		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3251		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3263		ECEA0GKN101	E.CAPACITOR 4V 100U	1	
D3001		MA151K	DIODE	1	
D3002,03		MA157	DIODE	2	
D3004,05		MA151K	DIODE	2	
D3006,07		MA151WA	DIODE	2	
D3008		MA151K	DIODE	1	
D3009		MA165	DIODE	1	
DL3001		VLD0155	DELAY	1	
DL3002		VLD0156	DELAY	1	
DL3003		VLD0158	DELAY	1	
DL3004		VLD0157	DELAY	1	
FL3001		VLF0658	FILTER	1	
FL3002		VLF0713	FILTER	1	
FL3004		ELB4L052	FILTER	1	
FL3005		VLF0658	FILTER	1	
FL3006		VLF0714	FILTER	1	
IC3001		MC74HC4053F	IC	1	
IC3002		AN6308S	IC	1	
IC3003		NJM79L05UA	IC	1	
IC3004,05		10116D	IC	2	
IC3007		VCR0153	IC	1	
IC3009		MC74HC04AF	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC3010		MN74HC221S	IC	1	
IC3011		MC74HC20F	IC	1	
IC3012		MN74HC221S	IC	1	
IC3014		AN608P	IC	1	
IC3015		NJM319M	IC	1	
IC3017		AN8009	IC	1	
IC3018		MC74HC4053F	IC	1	
IC3019		AN6308S	IC	1	
IC3020		SN76670N	IC	1	
IC3021		VCR0153	IC	1	
IC3023		AN608P	IC	1	
IC3024		NJM319M	IC	1	
IC3025		MN74HC221S	IC	1	
IC3026		MC74HC20F	IC	1	
IC3027		MN74HC221S	IC	1	
IC3028		AN8009	IC	1	
IC3029,30		NJM79L09UA	IC	2	
IC3031		AN8009	IC	1	
L1		VLQEL05F330J	COIL 33UH	1	PART OF VEP83078A
L1		VLQEL05F560J	COIL 56UH	1	PART OF VEP83095A
L2		VLQEL05F221J	COIL 220UH	1	PART OF VEP83078A
L2		VLQEL05F221K	COIL 220UH	1	PART OF VEP83095A
L3		VLQEL05F270J	COIL 27UH	1	
L3001,02		VLQEL05F221K	COIL 220UH	2	
L3003		VLQEL05F270J	COIL 27UH	1	
L3005		VLQEL05F221K	COIL 220UH	1	
L3006		VLQEL05F3R3J	COIL 3.3UH	1	
L3007-10		VLQEL05F221K	COIL 220UH	4	
L3011		VLQEL06F221K	COIL 220UH	1	
L3012		VLP0017	COIL	1	
L3018		VLP0017	COIL	1	
L3019		VLQEL05F101K	COIL 100UH	1	
L3020		VLQEL05F220J	COIL 22UH	1	
L3021-25		VLQEL05F221K	COIL 220UH	5	
L3026		VLQEL05F270J	COIL 27UH	1	
L3028		VLQEL05F221K	COIL 220UH	1	
L3029		VLQEL05F3R9J	COIL 3.9UH	1	
L3030-33		VLQEL05F221K	COIL 220UH	4	
L3034,35		VLQEL05F101K	COIL 100UH	2	
L3039		VLQEL05F101K	COIL 100UH	1	
L3041		VLQEL05F101K	COIL 100UH	1	
L3042		VLQEL05F221K	COIL 220UH	1	
L3043		VLQEL05F220J	COIL 22UH	1	
L3044-46		VLQEL05F221K	COIL 220UH	3	
Q3001		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3002		UN2115	COMBINATION PARTS	1	
Q3003-17		2SC2295	TRANSISTOR CHIP	15	(B,C)
Q3018-20		2SC2404	TRANSISTOR CHIP	3	(C,D)
Q3021-24		2SC2295	TRANSISTOR CHIP	4	(B,C)
Q3025		UN2213	TRANSISTOR-RESISTOR	1	
Q3026		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3027		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3029		2SC2480	TRANSISTOR	1	(R,S)
Q3030,31		2SA1226	TRANSISTOR	2	
Q3033		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3034		2SK198	TRANSISTOR CHIP	1	(Q)
Q3035		2SD601	TRANSISTOR CHIP	1	(R)
Q3036		2SB709	TRANSISTOR CHIP	1	(R)
Q3037,38		2SD601	TRANSISTOR CHIP	2	(R)
Q3039,40		2SB709	TRANSISTOR CHIP	2	(R)
Q3041,42		2SD601	TRANSISTOR CHIP	2	(R)
Q3043		UN2115	COMBINATION PARTS	1	
Q3044,45		2SB709	TRANSISTOR CHIP	2	(R)
Q3046		2SD601	TRANSISTOR CHIP	1	(R)
Q3047,48		UN2213	TRANSISTOR-RESISTOR	2	
Q3049-51		2SC2295	TRANSISTOR CHIP	3	(B,C)
Q3052		UN2115	COMBINATION PARTS	1	
Q3053		UN2210	TRANSISTOR-RESISTOR	1	
Q3054		2SC2404	TRANSISTOR CHIP	1	(D)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q3055		UN2213	TRANSISTOR-RESISTOR	1	
Q3056,57		2SC2295	TRANSISTOR CHIP	2	(B,C)
Q3058		UN2115	COMBINATION PARTS	1	
Q3059-72		2SC2295	TRANSISTOR CHIP	14	(B,C)
Q3073-75		2SC2404	TRANSISTOR CHIP	3	(C,D)
Q3076-79		2SC2295	TRANSISTOR CHIP	4	(B,C)
Q3080,81		2SC2404	TRANSISTOR CHIP	2	(D)
Q3082,83		2SA1022	TRANSISTOR CHIP	2	(B,C)
Q3084-86		2SC2295	TRANSISTOR CHIP	3	(B,C)
Q3087		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3088		UN2213	TRANSISTOR-RESISTOR	1	
Q3089,90		2SC2404	TRANSISTOR CHIP	2	(D)
Q3091		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3092,93		2SC2404	TRANSISTOR CHIP	2	(D)
Q3094		2SD601	TRANSISTOR CHIP	1	(R)
Q3095		2SC2480	TRANSISTOR	1	(R,S)
Q3096,97		2SA1226	TRANSISTOR	2	
Q3099		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3100		2SK198	TRANSISTOR CHIP	1	(Q)
Q3101,02		2SD601	TRANSISTOR CHIP	2	(R)
Q3103		2SB709	TRANSISTOR CHIP	1	(R)
Q3104		2SD601	TRANSISTOR CHIP	1	(R)
Q3105		2SB709	TRANSISTOR CHIP	1	(R)
Q3106		2SD601	TRANSISTOR CHIP	1	(R)
Q3107		2SB709	TRANSISTOR CHIP	1	(R)
Q3108		UN2115	COMBINATION PARTS	1	
Q3109		UN2210	TRANSISTOR-RESISTOR	1	
Q3110		2SC2404	TRANSISTOR CHIP	1	(D)
Q3111		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3113,14		IMX4T109	TRANSISTOR	2	
Q3115-20		2SC2404	TRANSISTOR CHIP	6	(D)
Q3121		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3122		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3123		2SC2404	TRANSISTOR CHIP	1	(D)
Q3124,25		2SA1022	TRANSISTOR CHIP	2	(B,C)
Q3126		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3127		2SC2404	TRANSISTOR CHIP	1	(D)
Q3128,29		2SA1022	TRANSISTOR CHIP	2	(B,C)
Q3130,31		2SC2295	TRANSISTOR CHIP	2	(B,C)
			RESISTORS		
R1		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	PART OF VEP83095A
R1		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	PART OF VEP83078A
R2		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	PART OF VEP83078A
R2		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	PART OF VEP83095A
R3		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R3001		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3002		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3003		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3004		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3005		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3006		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3007		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3008		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3009		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3010		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3011		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3012		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3013,14		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	2	
R3015		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3016		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3017		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3018		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3019		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3020.21		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3022		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R3023		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3024		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3025		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3026		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3027		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3028		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3029,30		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3031		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3032		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3033		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3034		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3035,36		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	2	
R3037		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3039		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R3040		ERJ8GEYJ561	M.RESISTOR CH 1/8W 560	1	
R3041		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3042		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3043		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3044,45		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3046		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3047		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3048		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3049		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3050		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3051		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3052-54		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R3055		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3056		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3057		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3058,59		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R3060		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3061		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3062		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3063		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3064		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3065		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3066,67		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3068		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3069		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3070		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3071		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3072,73		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3074		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3075,76		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	2	
R3077,78		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3079		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3080		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R3081		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3082-85		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	4	
R3086,87		VRE0034E51B	M.RESISTOR CH 1/10W 3320	2	
R3088,89		ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	2	
R3090		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3091		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3092,93		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R3094,95		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R3096		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3097		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3098		ERN55EC5300	M.RESISTOR 1/8W 530	1	
R3099		ERN55EC2130	M.RESISTOR 1/8W 213	1	
R3100		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3108		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3109		VRE0034E51A	M.RESISTOR CH 1/10W 332	1	
R3110		VRE0034E89A	M.RESISTOR CH 1/10W 825	1	
R3111		VRE0034E26A	M.RESISTOR CH 1/10W 182	1	
R3112		VRE0034E59A	M.RESISTOR CH 1/10W 402	1	
R3113		VRE0034E102	M.RESISTOR CH 1/10W 1K	1	
R3114		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3115		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R3116		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3117		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3118		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3121		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3122		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3123		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3124		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3125		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3126		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3127		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3128		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3129		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3130		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R3131		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3132		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3133		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3134		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3135		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3136		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3137		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3138		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3139		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3140		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3141		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3142		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R3143,44		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	2	
R3145		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3146		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R3147		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3148		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R3149		VRE0034E680	M.RESISTOR CH 1/10W 68	1	
R3150,51		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	2	
R3152,53		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R3154,55		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	2	
R3156		VRE0034E680	M.RESISTOR CH 1/10W 68	1	
R3157		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3158		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3159		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3160		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3161		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3162		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3163		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3164		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3165		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3166		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3167		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3168		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3169		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3170		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3171		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3172		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3173		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3174		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3175		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3176		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3177		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3178		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3179		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3180		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3181		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3182		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3183		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3184		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3185		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3186		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3187		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3188,89		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R3190,91		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3192		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3193		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3194		ERJ8GCYJ181	M.RESISTOR CH 1/8W	1	
R3195		ERJ8GCYJ151	M.RESISTOR CH 1/8W	1	
R3196		ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	1	
R3197		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3198		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3199		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3200		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3201		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3202		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3203		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3204		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3205		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3206		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R3207		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3208		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3209		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3210		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3211,12		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3213		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3214		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3215		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3216		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3217,18		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	2	
R3219		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3220		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3221		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3222		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3223,24		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R3225		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3226		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3227		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3228		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3229		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3230		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3231		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3232		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3233		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3234		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3235		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3236		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R3237		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3238		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R3240		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R3241		ERJ8GCYJ561	M.RESISTOR CH 1/8W 560	1	
R3242		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	1	
R3243,44		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3245		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3246		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3247		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3248,49		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R3250		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3251		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3252-54		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R3255		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3256		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3257,58		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3259		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3260,61		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R3262		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R3263		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3264		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3265		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3266		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R3267		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3268		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R3269		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R3270		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3271,72		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R3273		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R3274		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3275,76		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	2	
R3277		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R3278		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R3279,80		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R3281,82		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	2	
R3283,84		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	2	
R3285		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3286		ERN55EC5300	M.RESISTOR 1/8W 530	1	
R3287		ERN55EC2130	M.RESISTOR 1/8W 213	1	
R3288		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3289,90		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R3291		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3292		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3293		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	1	
R3294		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3295,96		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	2	
R3297		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3298		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3299		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R3300,01		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3302		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R3303		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3304		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3305		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3306		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3307		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3308		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3309		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3310		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3311		VRE0034E51A	M.RESISTOR CH 1/10W 332	1	
R3312		VRE0034E89A	M.RESISTOR CH 1/10W 825	1	
R3313		VRE0034E26A	M.RESISTOR CH 1/10W 182	1	
R3314		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3315		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3316		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3317		VRE0034E59A	M.RESISTOR CH 1/10W 402	1	
R3318		VRE0034E102	M.RESISTOR CH 1/10W 1K	1	
R3319		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3322		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3323		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3324		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3325		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3326		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3327		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3328		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3329		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3330		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3331,32		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3333		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3334		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3335		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3336		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3337		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R3338,39		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	2	
R3340		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3341		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R3342		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3343		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R3344		VRE0034E680	M.RESISTOR CH 1/10W 68	1	
R3345		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3346		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3347		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3348		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R3349		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3350		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3351		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3352		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3353		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3354		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3355		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3356		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3357		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3358		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3359		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3360		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3361		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3362		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3363,64		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3365		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3366		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3367		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3368		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3369,70		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3371		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3372		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3373		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R3374		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3375		ERJ8GCYJ181	M.RESISTOR CH 1/8W	1	
R3376		ERJ8GCYJ151	M.RESISTOR CH 1/8W	1	
R3377		ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	1	
R3378		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3379		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3380,81		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	2	
R3382		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3383		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3384		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3385		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3386		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3387,88		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3389		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3390		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3391		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3392-94		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	3	
R3395		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3396,97		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R3398		ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R3399		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3400		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3401		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
S3001		VJS1958	CONNECTOR(FEMALE)	1	
TH3002		ERTD2FHL332S	THERMISTOR	1	
VR3001		VRV0109B202	V.RESISTOR 2K	1	
VR3002		VRV0109B101	V.RESISTOR 100	1	
VR3003,04		VRV0109B202	V.RESISTOR 2K	2	
VR3005		VRV0109B101	V.RESISTOR 100	1	
VR3006		VRV0110B202	V.RESISTOR 2K	1	
VR3007		VRV0109B102	V.RESISTOR 1K	1	
VR3008		VRV0109B501	V.RESISTOR 500	1	
VR3009		VRV0109B102	V.RESISTOR 1K	1	
VR3010		VRV0109B203	V.RESISTOR 20K	1	
VR3011		VRV0109B501	V.RESISTOR 500	1	
VR3013		VRV0109B502	V.RESISTOR 5K	1	
VR3014		VRV0109B102	V.RESISTOR 1K	1	
VR3015		VRV0109B201	V.RESISTOR 200	1	
VR3016		VRV0109B102	V.RESISTOR 1K	1	
VR3017		VRV0109B101	V.RESISTOR 100	1	
VR3018,19		VRV0109B202	V.RESISTOR 2K	2	
VR3020		VRV0109B101	V.RESISTOR 100	1	
VR3021		VRV0110B202	V.RESISTOR 2K	1	
VR3022		VRV0109B102	V.RESISTOR 1K	1	
VR3023		VRV0109B501	V.RESISTOR 500	1	
VR3024		VRV0109B103	V.RESISTOR 10K	1	
VR3025		VRV0109B201	V.RESISTOR 200	1	
VR3026,27		VRV0109B502	V.RESISTOR 5K	2	
VR3028		VRV0109B102	V.RESISTOR 1K	1	
VR3029		VRV0109B201	V.RESISTOR 200	1	
VR3030,31		VRV0109B502	V.RESISTOR 5K	2	
			MISCELLANEOUS		
		VJR0119	PIN	4	
		VJR0133	PIN	3	
		VJR0422	PIN	4	
		VMP1149	P.C.B.HOLDER ANGLE	1	
		VSC1962	SHIELD CASE	1	
		VSC2700	SHIELD CASE	1	
		VSC2701	SHIELD CASE	1	
		VSC2702	SHIELD CASE	1	
		VSC2703	SHIELD CASE	1	
		VSC2704	SHIELD CASE	1	
		VSC2705	SHIELD CASE	1	
		XNG2E	NUT	2	
		XTV3+6F	SCREW	3	
		XYN2+C6FZ	SCREW	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEB0394A	P.C.BOARD W/COMPONENT		
			VIDEO 3 & 4 UNIT		
	■	VEP68051A	P.C.BOARD W/COMPONENT		
			VIDEO 3		
			CAPACITORS		
C3101		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3102		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3103		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3104		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3105		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3106		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3107		ECEA1VKN2R2	E.CAPACITOR 35V 2.2U	1	
C3108		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3109		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3110		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3114		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3115		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3116		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C3117		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3118		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3119		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C3120		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3121		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3122		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3123		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3125		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3126		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3127		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3128		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3129		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C3130		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3131		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3132		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3133		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3134		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3135		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C3136-38		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3139		ECQB1H102JZ	P.CAPACITOR 50V 1000P	1	
C3140		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3141		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3142		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3143		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3144		ECUX1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3145		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3146		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C3200		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3201		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3203		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C3204		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3205		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3206,07		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3208		ECEA1AU331	E.CAPACITOR 10V 330U	1	
C3209		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C3210		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3211		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3212,13		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3214		ECEA1AU331	E.CAPACITOR 10V 330U	1	
C3215		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C3216		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3217		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3218-20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3221		VCKD1H822JCH	C.CAPACITOR 50V 8200P	1	
C3222		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C3223		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3224,25		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3226		ECQM1H122JV	P.CAPACITOR 50V 1200P	1	
C3227		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3228		ECQM1H223JV	P.CAPACITOR 50V 0.022U	1	
C3229		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3230		ECQB1H183JZ	P.CAPACITOR 50V 0.018U	1	
C3231		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3232		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3233		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C3234		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3235		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3236		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3237,38		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	2	
C3239		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3301		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3302		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3303		ECUM1H050DCN	C.CAPACITOR CH 50V 50P	1	
C3305		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3306		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3307		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3308		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3309		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3310		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3311		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3312		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C3313		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3314		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3315		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3317		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3318		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3319		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3320		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3321		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3322		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3323		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3324		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3325		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3326		ECUM1H050DCN	C.CAPACITOR CH 50V 50P	1	
C3327		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3328		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3329		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3330		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3331		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3332		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3333		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3334		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3335		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3336		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3337		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3338		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3341		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3342		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C3343		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3344,45		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3401		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3402		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3404		ECUM1H030DCN	C.CAPACITOR CH 50V 3P	1	
C3405		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3406		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3407		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C3408		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3409		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3410		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3411		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3412,13		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3414		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3415		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C3416		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C3417		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3418		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3419,20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3421		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3422		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C3423		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3424		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C3425,26		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3428		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3429		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3430		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3431		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C3432		ECUX1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3433		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3434		ECUX1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3435		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3436		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3437		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3438		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3439		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3501-03		ECEA1AU221	E.CAPACITOR 10V 220U	3	
C3504		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3505		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C3506-17		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	12	
C3518		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C3519,20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3521,22		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	2	
D3102		MA151WA	DIODE	1	
D3104		MA151K	DIODE	1	
D3200		1SZ51	DIODE	1	
D3201		RD5.6EB2	ZENER 5.6V	1	
D3202		MA151K	DIODE	1	
D3203,04		MA328	DIODE	2	
D3301		MA151K	DIODE	1	
D3400		MA151WA	DIODE	1	
D3401-04		MA151K	DIODE	4	
D3405		MA153	DIODE	1	
D3406		MA151K	DIODE	1	
D3408		MA151K	DIODE	1	
D3501,02		MA151K	DIODE	2	
FL3101		VLF0521	FILTER	1	
FL3200,01		ELB5F105	FILTER	2	
FL3400		VLF0545	FILTER	1	
IC3102,03		NJM082BM	IC	2	
IC3104		NJM319M	IC	1	
IC3105		MN4538BS	IC	1	
IC3106,07		MN74HC221S	IC	2	
IC3108		MN74HC04S	IC	1	
IC3109		MN74HC08S	IC	1	
IC3110		MN74HC00S	IC	1	
IC3200-02		MN74HC74S	IC	3	
IC3203		MN74HC574S	IC	1	
IC3204,05		MN74HC157S	IC	2	
IC3206		VSI0398	IC	1	
IC3207		MN74HC74S	IC	1	
IC3208		MN74HC08S	IC	1	
IC3209,10		HM63021P	IC	2	
IC3211,12		HA19510	IC	2	
IC3213,14		AN78L05	IC	2	
IC3215		NJM082BM	IC	1	
IC3216		MN4053BS	IC	1	
IC3217		NJM082BM	IC	1	
IC3218		MN74HC00S	IC	1	
IC3220		MN74HC240S	IC	1	
IC3221		MN74HC03S	IC	1	
IC3301		NJM1496M	IC	1	
IC3302		MN4053BS	IC	1	
IC3303		NJM1496M	IC	1	
IC3305,06		NJM082BM	IC	2	
IC3307		MN4053BS	IC	1	
IC3401		NJM082BM	IC	1	
IC3402		MN74HC221S	IC	1	
IC3404		MN74HC00S	IC	1	
IC3405		MN4052BS	IC	1	
IC3406		MN74HC21S	IC	1	
IC3407		MN74HC00S	IC	1	
IC3408		MN74HC32S	IC	1	
IC3409		MN74HC08S	IC	1	
IC3410		MN74HCU04S	IC	1	
IC3411		MN74HC00S	IC	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC3500		MN74HC221S	IC	1	
IC3510		CXD1175M	IC	1	
IS3001S		VJS2575	CONNECTOR (FEMALE)	1	
L3101		VLQEL05F220K	COIL 22UH	1	
L3103,04		VLP0017	COIL	2	
L3105,06		VLQEL05F220K	COIL 22UH	2	
L3107		VLQEL05F821J	COIL 820UH	1	
L3108		VLQEL05F220K	COIL 22UH	1	
L3109		VLP0017	COIL	1	
L3200		VLP0017	COIL	1	
L3201,02		VLQEL05F220K	COIL 22UH	2	
L3203		VLP0017	COIL	1	
L3301		VLQEL05F220K	COIL 22UH	1	
L3303		VLQEL05F6R8J	COIL 6.8UH	1	
L3304		VLQEL05F3R9J	COIL 3.9UH	1	
L3305		VLQEL05F150J	COIL 15UH	1	
L3306-10		VLQEL05F220K	COIL 22UH	5	
L3400,01		VLQEL05F220K	COIL 22UH	2	
L3402		VLQEL05F470J	COIL 47UH	1	
L3403-07		VLQEL05F220K	COIL 22UH	5	
L3503		VLP0017	COIL	1	
P3001-04		VJP1246T	CONNECTOR(MALE) 6P	4	
Q3101		2SB709	TRANSISTOR CHIP	1	(R)
Q3102,03		2SC2404	TRANSISTOR CHIP	2	(D)
Q3104		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3105		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3106		2SD601	TRANSISTOR CHIP	1	(R)
Q3107		2SK374	TRANSISTOR	1	
Q3108		2SB709	TRANSISTOR CHIP	1	(R)
Q3109,10		2SD601	TRANSISTOR CHIP	2	(R)
Q3111		2SK374	TRANSISTOR	1	
Q3200		2SB709	TRANSISTOR CHIP	1	(R)
Q3201		2SK198	TRANSISTOR CHIP	1	(Q)
Q3301,02		2SC2404	TRANSISTOR CHIP	2	(D)
Q3303		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3304		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3305-08		2SD601	TRANSISTOR CHIP	4	(R)
Q3309		2SK374	TRANSISTOR	1	
Q3310		2SD601	TRANSISTOR CHIP	1	(R)
Q3311		2SB709	TRANSISTOR CHIP	1	(R)
Q3312,13		2SC2404	TRANSISTOR CHIP	2	(D)
Q3314		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3315		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3316		2SD601	TRANSISTOR CHIP	1	(R)
Q3317		2SB709	TRANSISTOR CHIP	1	(R)
Q3318,19		2SD601	TRANSISTOR CHIP	2	(R)
Q3320		2SK374	TRANSISTOR	1	
Q3321		2SD601	TRANSISTOR CHIP	1	(R)
Q3400,01		2SC2404	TRANSISTOR CHIP	2	(D)
Q3402		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q3403		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q3404		2SB709	TRANSISTOR CHIP	1	(R)
Q3405,06		2SD601	TRANSISTOR CHIP	2	(R)
Q3407,08		2SB709	TRANSISTOR CHIP	2	(R)
Q3409,10		2SD601	TRANSISTOR CHIP	2	(R)
Q3411		2SB709	TRANSISTOR CHIP	1	(R)
Q3412		2SD601	TRANSISTOR CHIP	1	(R)
Q3413		2SK374	TRANSISTOR	1	
Q3414		2SC2404	TRANSISTOR CHIP	1	(D)
Q3415,16		2SD601	TRANSISTOR CHIP	2	(R)
Q3417,18		2SC2295	TRANSISTOR CHIP	2	(B,C)
Q3419		2SD601	TRANSISTOR CHIP	1	(R)
Q3420		2SB709	TRANSISTOR CHIP	1	(R)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q3501		2SB956	TRANSISTOR	1	
Q3502		UN2213	TRANSISTOR-RESISTOR	1	
Q3503		2SD1328	TRANSISTOR CHIP	1	
Q3504		2SB709	TRANSISTOR CHIP	1	(R)
Q3505		2SB956	TRANSISTOR	1	
Q3506,07		UN2213	TRANSISTOR-RESISTOR	2	
Q3508		2SB956	TRANSISTOR	1	
Q3509		UN2213	TRANSISTOR-RESISTOR	1	
Q3510		2SB956	TRANSISTOR	1	
Q3511		UN2213	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R3101		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R3102		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3103		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3104		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3105,06		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R3107,08		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	2	
R3109		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3110		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	
R3111		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3112		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3113		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3114,15		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R3116		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3117		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3119		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3120		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3121		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3125		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R3127		ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
R3128		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3129		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3130		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3131		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3132		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3133		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3134		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R3135		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R3136		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3137		VREO034E822	M.RESISTOR CH 1/10W 8.2K	1	
R3138		VREO034E121	M.RESISTOR CH 1/10W 120	1	
R3139		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3140		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3141		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R3142		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3143		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3144		VREO034E103	M.RESISTOR CH 1/10W 10K	1	
R3145		VREO034E563	M.RESISTOR CH 1/10W 56K	1	
R3146		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3147		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3148		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3149		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3150		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3151		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3152		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3153		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3154		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3155		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R3156		ERDS2TJ684	C.RESISTOR 1/4W 680K	1	
R3201-16		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	16	
R3219,20		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3223,24		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3225		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R3226		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3227		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3228		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3229		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3230		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R3231		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3232		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3233		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3234		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3235		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R3236		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3237		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R3238		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3239		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3240,41		ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	2	
R3242,43		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3244		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3301,02		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3303,04		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3305		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3306		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3307		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3308		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3309		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3310		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3311		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3312		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3313		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3314,15		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3316		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3317		VREO034E471	M.RESISTOR CH 1/10W 470	1	
R3318		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3319,20		VREO034E560	M.RESISTOR CH 1/10W 56	2	
R3321,22		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3323		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R3324		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R3325		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3326		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3327		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3328		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3329		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3331		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3332		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3333		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3334		ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
R3335		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3336		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3337		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3338		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3339		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3340		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3341,42		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3343,44		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3345		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3346		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3347		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3348		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3349		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3350		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3351		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3352		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3353		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3354		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3355		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3356		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3357		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3358,59		ERJ6GEYJ560	M.RESISTOR CH 1/10W 56	2	
R3360,61		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R3362		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3363		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R3364		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3365		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3366,67		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R3368		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3369		ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
R3370		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3371		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3372		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3373		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3374		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3379,80		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R3381		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3382,83		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	2	
R3384		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3385		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3386,87		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R3388		VRE0034E471	M.RESISTOR CH 1/10W 470	1	
R3400		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3401,02		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R3403,04		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R3405		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3406		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3407		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3408		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3409		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3410,11		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	2	
R3412		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3413,14		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R3415,16		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	2	
R3417,18		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	2	
R3419,20		VRE0034E680	M.RESISTOR CH 1/10W 68	2	
R3421		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3422		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3423		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3424		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3425		ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
R3426		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3427		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3428		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3429		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3430-32		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	3	
R3433		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3434		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3435,36		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R3437		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3438		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R3439		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3440		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3441		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3442		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3443		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R3444		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3445		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3446		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3447		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R3450		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3451,52		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	2	
R3453		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3454		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3458		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3460		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R3461		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3462		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3463,64		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R3465,66		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	2	
R3467		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3468		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3469,70		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R3471		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R3472		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3473		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3474		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3475		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R3476		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3477		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R3478		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3479		ERDS2TJ105	C.RESISTOR 1/4W 1000K	1	
R3501		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3502		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3503		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3504		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3505		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3506		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3507		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3508		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3509		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3510		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3511		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R3512		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3513-16		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	4	
SW3001,02		VJP1940	CONNECTOR SWITCH	2	
TG3004-06		VJR0235	TEST POINT	3	
TG3008-11		VJR0235	TEST POINT	4	
TH3301,02		ERTD2FHL332S	THERMISTOR	2	
VC3301		ECV1ZW20X53T	V.CAPACITOR 20P	1	
VC3401		ECV1ZW20X53T	V.CAPACITOR 20P	1	
VL3200		VLQ0287	COIL	1	
VR3003		VRV0109B102	V.RESISTOR 1K	1	
VR3004		VRV0109B502	V.RESISTOR 5K	1	
VR3007		VRV0110B502	V.RESISTOR 5K	1	
VR3008		VRV0109B502	V.RESISTOR 5K	1	
VR3011		VRV0110B502	V.RESISTOR 5K	1	
VR3012		VRV0110B203	V.RESISTOR 5K	1	
VR3013		VRV0109B203	V.RESISTOR 20K	1	
VR3014-16		VRV0110B502	V.RESISTOR 5K	3	
VR3017		VRV0110B203	V.RESISTOR 5K	1	
VR3018		VRV0109B203	V.RESISTOR 20K	1	
VR3019		VRV0110B501	V.RESISTOR 500	1	
VR3020		VRV0109B202	V.RESISTOR 2K	1	
VR3021		VRV0109B203	V.RESISTOR 20K	1	
VR3022		VRV0109B103	V.RESISTOR 10K	1	
VR3023		VRV0110B103	V.RESISTOR 10K	1	
VR3024,25		VRV0109B202	V.RESISTOR 2K	2	
X0001		VSX0066	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJF0445	P.C.B.HOOK (2)	2	
		VJF0446	P.C.B.HOOK (1)	2	
		VJS1940	CONNECTOR(FEMALE)	2	
		VJS1958	CONNECTOR(FEMALE)	1	
		VMP1149	P.C.B.HOLDER ANGLE	1	
		VSC1983	SHIELD CASE	1	
		VSC2001	SHIELD CASE	1	
		VSC2041	SHIELD CASE	1	
		XNG2E	NUT	2	
		XTV3+6F	SCREW	3	
		XYN2+C6FZ	SCREW	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP88052A	P.C.BOARD W/COMPONENT		PART OF VEB0394A
			VIDEO 4		
	■	VEP88053C	P.C.BOARD W/COMPONENT		PART OF VEB0394A
			VIDEO 4 SUB		
			CAPACITORS		
C8101		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8102		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8103		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8104		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8105		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8106		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C8107		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C8108,09		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8110		ECEA1VKN2R2	E.CAPACITOR 35V 2.2U	1	
C8111		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C8112		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C8114,15		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8116,17		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C8118,19		ECEA1AK330	E.CAPACITOR 10V 33U	2	
C8120,21		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8122,23		ECEA1AK470	E.CAPACITOR 10V 47U	2	
C8124		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C8128		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8129		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8130		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8131		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8132		ECEA1CKN4R7	E.CAPACITOR 16V 4.7U	1	
C8133		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	1	
C8134		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C8135		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C8136		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C8137		ECQB1H682JZ	P.CAPACITOR 50V 6800P	1	
C8138		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C8139		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8140		ECQB1H102JZ	P.CAPACITOR 50V 1000P	1	
C8141		ECQB1H682JZ	P.CAPACITOR 50V 6800P	1	
C8201		ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C8202-04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C8205		ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C8206-08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C8209		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C8210		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C8211		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C8212		ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
C8213		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8214		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8301		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8302		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8303		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C8304		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C8305		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8306		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C8307		ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C8308		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8309		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8310		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C8311		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C8312		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C8313		ECEA1CKN4R7	E.CAPACITOR 16V 4.7U	1	
C8314		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C8315		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8316		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8317		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8318		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8319		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8320		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8321		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8322		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8323		ECEA0JKN470	E.CAPACITOR 6.3V 47U	1	
C8324		ECUK1H470JCN	C.CAPACITOR CH 50V 47P	1	
C8325		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C8326		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C8327,28		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8329		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C8330		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C8331		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C8332		ECQB1H682JZ	P.CAPACITOR 50V 6800P	1	
C8333		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C8334		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C8335		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	1	
C8336		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C8337,38		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8339		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C8340		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8401		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C8402		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8403		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8404		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8405		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8406		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8407		VCKD1H222JCH	C.CAPACITOR 50V 2200P	1	
C8408		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C8409		ECQB1H122JZ	P.CAPACITOR 50V 1200P	1	
C8410		ECQB1H223JZ	P.CAPACITOR 50V 0.022U	1	
C8411		ECQB1H183JZ	P.CAPACITOR 50V 0.018U	1	
C8412		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C8413		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8414		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8415		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8416		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C8417		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C8418		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C8419,20		ECUX1H470JCN	C.CAPACITOR CH 50V 47P	2	
C8421,22		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8423		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8451-58		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	8	
C8501		ECQB1H123JZ	P.CAPACITOR 50V 0.012U	1	
C8502		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	1	
C8503		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C8504		ECQB1H102JZ	P.CAPACITOR 50V 1000P	1	
C8505		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C8506		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C8507		ECUX1H820JCN	C.CAPACITOR CH 50V 82P	1	
C8508		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C8509		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C8510		ECQK1222JZ	P.CAPACITOR 100V 2200P	1	
C8511		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8512		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8515		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C8516		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C8601-16		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	16	
C8617		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8618		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8619		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C8620		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C8621		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C8622		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C8623		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C8624		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C8625,26		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C8627		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
D8102		MA151WA	DIODE	1	
D8301		MA151WA	DIODE	1	
D8401		1SZ51	DIODE	1	
D8402,03		MA328	DIODE	2	
D8501-03		MA151K	DIODE	3	
D8601		1SS16	DIODE	1	
DL8301		EL85G046	FILTER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
FL8101		VLF0712	FILTER	1	
FL8301		VLF0712	FILTER	1	
IC8101		NJM082BM	IC	1	
IC8102		NJM4560MD	IC	1	
IC8103		CXD1175M	IC	1	
IC8104		NJM319M	IC	1	
IC8201		MC74HC574F	IC	1	
IC8202-04		HM63021P	IC	3	
IC8205		MC74HC161F	IC	1	
IC8206		UPD65042F024	IC	1	
IC8207,08		MC74HC257F	IC	2	
IC8211		MC74HC00F	IC	1	
IC8212		MC74HC04F	IC	1	
IC8213		MC74HC244F	IC	1	
IC8214		MC74HC157F	IC	1	
IC8215		MC74HC00F	IC	1	
IC8216		MC74HC02F	IC	1	
IC8217		MC74HC74F	IC	1	
IC8218		MC74HC244F	IC	1	
IC8301		HA19510	IC	1	
IC8302		AN78L05	IC	1	
IC8303		NJM082BM	IC	1	
IC8304		NJM319M	IC	1	
IC8305		MN74HC221S	IC	1	
IC8401		MC74HC03F	IC	1	
IC8402		MC74HC04F	IC	1	
IC8403		NJM082BM	IC	1	
IC8405		MC14053BF	IC	1	
IC8406-08		NJM082BM	IC	3	
IC8409		VSI0399	IC	1	
IC8450		UPD65022F210	IC	1	
IC8451		MC74HC240F	IC	1	
IC8452		MC74HC02F	IC	1	
IC8453,54		MC74HC74F	IC	2	
IC8455		MC74HC173F	IC	1	
IC8456		MC74HC273F	IC	1	
IC8457		MC74HC164F	IC	1	
IC8458		MC74HC74F	IC	1	
IC8459		MC74HC164F	IC	1	
IC8460		MC74HC00F	IC	1	
IC8461		MC74HC4053F	IC	1	
IC8501		SN74LS123NS	IC	1	
IC8502		MC14538BF	IC	1	
IC8503		SN74LS221NS	IC	1	
IC8504		MN74HC221S	IC	1	
IC8505		MC74HC240F	IC	1	
IC8506		MC74HC08F	IC	1	
IC8507		MC74HC00F	IC	1	
IC8508		MC74HC08F	IC	1	
IC8509		MC74HC74F	IC	1	
IC8510		MC74HC157F	IC	1	
IC8511,12		UPD74HC166G	IC	2	
IC8514		MN74HC221S	IC	1	
IS8001		VJS2370	CONNECTOR (FEMALE)	1	
L8101		VLP0017	COIL	1	
L8102-05		VLQEL05F220K	COIL 22UH	4	
L8106		VLP0017	COIL	1	
L8107		VLQEL05F221K	COIL 220UH	1	
L8108		VLQEL05F821K	COIL 820UH	1	
L8109		VLP0017	COIL	1	
L8201,02		VLQEL05F221K	COIL 220UH	2	
L8203		VLP0017	COIL	1	
L8301		VLP0017	COIL	1	
L8302-05		VLQEL05F220K	COIL 22UH	4	
L8306		VLQEL05F680K	COIL 68UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L8307		VLQEL05F821K	COIL 820UH	1	
L8401,02		VLP0017	COIL	2	
L8403,04		VLQEL05F220K	COIL 22UH	2	
L8405		VLQ0287	COIL	1	
L8501,02		VLP0017	COIL	2	
L8601,02		VLQEL05F220K	COIL 22UH	2	
L8603		VLQEL05F120K	COIL 12UH	1	
P8001-04		VJP1246T	CONNECTOR(MALE) 6P	4	
P8451-70		VJR0119	CONNECTOR	20	
Q8101		2SB709	TRANSISTOR CHIP	1	(R)
Q8102,03		2SC2404	TRANSISTOR CHIP	2	(D)
Q8104		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q8105,06		2SC2295	TRANSISTOR CHIP	2	(B,C)
Q8107		2SD601	TRANSISTOR CHIP	1	(R)
Q8108		2SK374	TRANSISTOR	1	
Q8109		2SB709	TRANSISTOR CHIP	1	(R)
Q8110,11		2SD601	TRANSISTOR CHIP	2	(R)
Q8112,13		2SB709	TRANSISTOR CHIP	2	(R)
Q8301		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q8302		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q8303		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q8304-06		2SA1022	TRANSISTOR CHIP	3	(B,C)
Q8307		2SD601	TRANSISTOR CHIP	1	(R)
Q8308,09		2SC2404	TRANSISTOR CHIP	2	(D)
Q8310		2SA1022	TRANSISTOR CHIP	1	(B,C)
Q8311		2SC2295	TRANSISTOR CHIP	1	(B,C)
Q8312,13		2SK374	TRANSISTOR	2	
Q8314		2SD601	TRANSISTOR CHIP	1	(R)
Q8401		2SB709	TRANSISTOR CHIP	1	(R)
Q8402		2SK198	TRANSISTOR CHIP	1	(Q)
Q8601		2SD601	TRANSISTOR CHIP	1	(R)
Q8602		2SB709	TRANSISTOR CHIP	1	(R)
Q8603,04		2SD601	TRANSISTOR CHIP	2	(R)
			RESISTORS		
R8101		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8102		ERDS2TJ821	C.RESISTOR 1/4W 820	1	
R8103		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R8104		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R8105		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R8106		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R8107,08		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R8109,10		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	2	
R8111		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R8112		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R8113		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8114,15		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R8116		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8117		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R8118		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8119		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8120		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R8121		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R8122		ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
R8123		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R8128		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R8129		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R8130		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8131		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8132		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R8133		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R8134		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8135		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R8136		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R8137		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R8138		VRE0034E822	M.RESISTOR CH 1/10W 8.2K	1	
R8139		VRE0034E331	M.RESISTOR CH 1/10W 330	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R8140		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R8141		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8142,43		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	2	
R8144		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8145		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R8146		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8147,48		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R8149		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R8150		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R8201,02		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	2	
R8203,04		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	2	
R8205		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8206		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R8303		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R8304		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R8305		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8306		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R8307		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8308		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R8309		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R8310		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R8311		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R8312		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R8313,14		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R8315		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R8316		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8317		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R8318,19		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R8320		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R8321		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8322		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R8323		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8324		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R8325		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R8326,27		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R8328,29		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R8330		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8331		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R8332		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R8333-35		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	3	
R8336		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R8337		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8338		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R8339		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R8340.41		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R8342		ERJ6GEYK475	M.RESISTOR CH 1/10W 4.7M	1	
R8343		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R8344		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R8345		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R8346		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R8347		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R8348		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R8349		VRE0034E561	M.RESISTOR CH 1/10W 560	1	
R8350		VRE0034E822	M.RESISTOR CH 1/10W 8.2K	1	
R8351		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R8352		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R8353		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R8354		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R8355		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R8356		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R8357		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R8358		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R8359		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R8360		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R8361		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R8362		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8401		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R8402		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8403		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R8404		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R8405		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R8406		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R8407		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R8408		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R8409		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R8410		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R8411-13		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R8414		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R8415		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R8416		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8417		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R8418.19		ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	2	
R8420,21		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R8422		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R8423		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R8424		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8501		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R8502		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R8503		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R8504		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8505		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R8506		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8507,08		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	2	
R8509		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R8512		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R8513		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R8514,15		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R8520-27		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	8	
R8530-37		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	8	
R8601		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R8602		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R8603		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R8604		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R8605		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R8606		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R8607		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R8608		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R8609		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R8610		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R8611		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
S8401-03		VJS1435	CONNECTOR(FEMALE)	3	
SW8401		VJP1940	CONNECTOR SWITCH	1	
SW8405		VSS0283	SWITCH	1	
SW8501,02		VST0096	SWITCH	2	
VR8001		VRV0109B102	V.RESISTOR 1K	1	
VR8002		VRV0109B502	V.RESISTOR 5K	1	
VR8006		VRV0109B502	V.RESISTOR 5K	1	
VR8009		VRV0109B203	V.RESISTOR 20K	1	
VR8010		VRV0109B202	V.RESISTOR 2K	1	
VR8030,31		VRV0109B103	V.RESISTOR 10K	2	
X8201		VSX0114	CRYSTAL OSCILLATOR	1	
X8202		VSX0127	CRYSTAL OSCILLATOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEB0392A	P.C.BOARD W/COMPONENT		
			AUDIO MAIN UNIT		
	■	VEP84009G	P.C.BOARD W/COMPONENT		PART OF VEB0392A
			AUDIO MAIN		
	■	VEP80217A	P.C.BOARD W/COMPONENT		PART OF VEP84009G
			AUDIO MAIN SUB 3		
	■	VEP84015B	P.C.BOARD W/COMPONENT		PART OF VEP84009G
			AUDIO MAIN SUB 4		
	■	VEP80218A	P.C.BOARD W/COMPONENT		PART OF VEP84009G
			AUDIO MAIN SUB 5		
	■	VEP84079A	P.C.BOARD W/COMPONENT		PART OF VEP84009G
			AUDIO MAIN SUB 6		
	■	VEP84090A	P.C.BOARD W/COMPONENT		PART OF VEP84009G
			AUDIO MAIN SUB 7		
	■	VEP84100A	P.C.BOARD W/COMPONENT		PART OF VEP84009G
			AUDIO MAIN SUB 8		
			CAPACITORS		
C1		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	PART OF VEP80217B
C1		ECEA1HKSR47	E.CAPACITOR 50V 0.47U	1	PART OF VEP84100A
C1		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	PART OF VEP84079A
C1		ECUX1H561JN	C.CAPACITOR CH 50V 560P	1	PART OF VEP80218A
C2		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C2		ECEA1HKSR47	E.CAPACITOR 50V 0.47U	1	PART OF VEP84100A
C2		ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	PART OF VEP84079A
C3		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	PART OF VEP84079A
C3		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	PART OF VEP80217B
C3		ECEA1HKSR47	E.CAPACITOR 50V 0.47U	1	PART OF VEP84100A
C4		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	PART OF VEP80217B
C4		ECEA1ASN100	E.CAPACITOR 10V 10U	1	PART OF VEP84079A
C4		ECEA1HKSR47	E.CAPACITOR 50V 0.47U	1	PART OF VEP84100A
C5		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	PART OF VEP80217B
C5		ECEA1ASN100	E.CAPACITOR 10V 10U	1	PART OF VEP84079A
C6		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	PART OF VEP80217B
C6		ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	1	PART OF VEP84079A
C7		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	PART OF VEP84079A
C8		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C8		ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	PART OF VEP84079A
C9		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	PART OF VEP84079A
C9		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C10		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C10		ECEA1ASN100	E.CAPACITOR 10V 10U	1	PART OF VEP84079A
C11		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C11		ECEA1ASN100	E.CAPACITOR 10V 10U	1	PART OF VEP84079A
C12		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C12		ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	1	PART OF VEP84079A
C13-20		ECEA0JK221	E.CAPACITOR 6.3V 220U	8	PART OF VEP80217B
C4001		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C4003		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C4004		VCK0035473KR	C.CAPACITOR 50V 0.047U	1	
C4006		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C4007		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4010		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	1	
C4011		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4012		ECUX1H822KBN	C.CAPACITOR CH 50V 8200P	1	
C4013		ECUM1E153KBN	C.CAPACITOR CH 25V 0.015U	1	
C4014		ECEA1HKNR22	E.CAPACITOR 50V 0.22U	1	
C4015		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C4016		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C4018		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C4019		VCK0035473KR	C.CAPACITOR 50V 0.047U	1	
C4021		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C4022		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4025		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4026		ECUX1H822KBN	C.CAPACITOR CH 50V 8200P	1	
C4027		ECUM1E153KBN	C.CAPACITOR CH 25V 0.015U	1	
C4028		ECEA1HKNR22	E.CAPACITOR 50V 0.22U	1	
C4029		ECEA1HKR33	E.CAPACITOR 50V 0.33U	1	
C4032,33		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2	
C4047,48		ECEA1AKN100	E.CAPACITOR 10V 10U	2	
C4061		VCK0035103KR	C.CAPACITOR 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4062,63		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2	
C4064		VCK0035103KR	C.CAPACITOR 50V 0.01U	1	
C4065		VCF0045	P.CAPACITOR	1	
C4066		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C4067		VCK0035103KR	C.CAPACITOR 50V 0.01U	1	
C4068,69		ECUX1H472KBN	C.CAPACITOR CH 50V 4700P	2	
C4070		VCK0035103KR	C.CAPACITOR 50V 0.01U	1	
C4071		VCF0046	P.CAPACITOR	1	
C4073		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	1	
C4080.81		ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	2	
C4084		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	1	
C4085		ECEA1AKN330	E.CAPACITOR 10V 33U	1	
C4090,91		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2	
C4092		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C4093,94		ECEA1AKN100	E.CAPACITOR 10V 10U	2	
C4095,96		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	2	
C4101,02		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	2	
C4103,04		ECEA1AKN100	E.CAPACITOR 10V 10U	2	
C4105,06		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C4107		ECEA1AKS220	E.CAPACITOR 10V 22U	1	
C4108		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C4113		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C4114		ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	1	
C4115		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C4116		ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	1	
C4117-22		ECEA1AKN100	E.CAPACITOR 10V 10U	6	
C4125		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C4132		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C4134,35		ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C4138		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C4141,42		ECQB1H272JZ	P.CAPACITOR 50V 2700P	2	
C4143,44		ECEA1AKN100	E.CAPACITOR 10V 10U	2	
C4145,46		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	2	
C4147		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C4151,52		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	2	
C4153		ECEA1CKS220	E.CAPACITOR 16V 22U	1	
C4201		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C4202		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4207		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C4210		ECEA0JKN220	E.CAPACITOR 6.3V 22U	1	
C4211		ECEA0GKA221	E.CAPACITOR 4V 220U	1	
C4212,13		ECEA1AKN330	E.CAPACITOR 10V 33U	2	
C4214		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4215		ECEA16Z10	E.CAPACITOR 16V 10U	1	
C4216		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4217		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C4220		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C4221,22		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	2	
C4223		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C4224		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4229		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C4232		ECEA0JKN220	E.CAPACITOR 6.3V 22U	1	
C4233		ECEA0GKA221	E.CAPACITOR 4V 220U	1	
C4234,35		ECEA1AKN330	E.CAPACITOR 10V 33U	2	
C4236		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4237		ECEA16Z10	E.CAPACITOR 16V 10U	1	
C4238		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4239		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C4242		ECEA1AK330	E.CAPACITOR 10V 33U	1	
C4243,44		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4245-47		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C4249		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C4250,51		ECUX1H681JN	C.CAPACITOR CH 50V 680P	2	
C4252		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4253		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C4254		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C4255		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4257		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C4259		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C4262-64		ECEA1AKN100	E.CAPACITOR 10V 10U	3	
C4265		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4266		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C4267		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C4274-77		ECEA1CK100	E.CAPACITOR 16V 10U	4	
C4282		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4283		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C4284,85		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C4286		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4287		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C4288		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4289		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C4290		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4291		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C4292,93		ECEA1AKN100	E.CAPACITOR 10V 10U	2	
C4294,95		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C4296~99		ECEA0JK221	E.CAPACITOR 6.3V 220U	4	
C4300,01		ECEA1AKN100	E.CAPACITOR 10V 10U	2	
C4302		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C4303		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
D1		MA151K	DIODE	1	PART OF VEP84100A
D1-D4		MA704	DIODE	4	
D4001,02		MA153	DIODE	2	
D4008		MA151K	DIODE	1	
D4009		MA151WA	DIODE	1	
D4010		MA153	DIODE	1	
D4011~16		MA151K	DIODE	6	
D4018,19		MA151K	DIODE	2	
D4201		MA151K	DIODE	1	
D4202		MA153	DIODE	1	
D4203		MA151K	DIODE	1	
D4204		MA153	DIODE	1	
D4208,09		MA704	DIODE	2	
D4210		MA151K	DIODE	1	
D4211		MA151WK	DIODE	1	
D4212,13		MA704	DIODE	2	
FL4001		VLF0427	FILTER	1	
FL4002		ELM7Q306A	COIL	1	
FL4003		VLF0427	FILTER	1	
FL4004		ELM7Q306A	COIL	1	
FL4005,06		EIR7QF011B	FILTER	2	
FL4007,08		VLQ0142	COIL	2	
FL4009,10		VLF0427	FILTER	2	
FL4011,12		VLF0776	FILTER	2	
IC1		NJM2902M	IC	1	PART OF VEP84100A
IC1		NJM4558M	IC	1	PART OF VEP80218A
IC1		NJM4558M	IC	1	PART OF VEP84079A
IC1		NJM4558M	IC	1	
IC2		NJM2902M	IC	1	PART OF VEP84100A
IC2		NJM4558M	IC	1	PART OF VEP84079A
IC4001		VEP84015B	P.C.BOARD W/COMPONENT	1	
IC4002		NJM4558M	IC	1	
IC4003		AN6209S	IC	1	
IC4004		NJM4558M	IC	1	
IC4005		MN4001BS	IC	1	
IC4006		VCR0156	IC	1	
IC4007		NJM4558M	IC	1	
IC4008		AN6209S	IC	1	
IC4009		NJM4558M	IC	1	
IC4014		MN4053BS	IC	1	
IC4016		VEP84015B	P.C.BOARD W/COMPONENT	1	
IC4018		MN4081BS	IC	1	
IC4019		MN4030BS	IC	1	
IC4020		MN4538BS	IC	1	
IC4023		VEP80210A	P.C.BOARD W/COMPONENT	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC4024		VEP80210A	P.C.BOARD W/COMPONENT	1	
IC4203,04		NJM4558M	IC	2	
IC4205		AN3920K	IC	1	
IC4206~08		NJM4558M	IC	3	
IC4209		MN4053BS	IC	1	
IC4210		AN78L05	IC	1	
L4001,02		VLQEL06F121K	COIL 120UH	2	
L4003,04		EIR7QG010B	IF TRANSFORMER	2	
L4202		VLQEL05F331K	COIL 330UH	1	
L4203		VLQEL05F221K	COIL 220UH	1	
L4204		VLQEL05F680K	COIL 68UH	1	
L4205		VLQEL05F470K	COIL 47UH	1	
L4206~09		VLQEL05F221K	COIL 220UH	4	
P1		VJP1231T	CONNECTOR(MALE) 4P	1	
P1		VJP1243T	CONNECTOR(MALE) 3P	1	PART OF VEP84100A
P4201		VJP1236T	CONNECTOR(MALE) 9P	1	
P4202-04		VJP1232T	CONNECTOR(MALE) 5P	3	
P4205		VJP1231T	CONNECTOR(MALE) 4P	1	
P4206		VJP1233T	CONNECTOR(MALE) 6P	1	
P4207		VJP1236T	CONNECTOR(MALE) 9P	1	
P4208		VJP1231T	CONNECTOR(MALE) 4P	1	
P4209		VJP1233T	CONNECTOR(MALE) 6P	1	
P4210		VJP1230T	CONNECTOR(MALE) 3P	1	
P4211		VJP1235T	CONNECTOR(MALE) 8P	1	
P4212		VJP1232R	CONNECTOR(MALE) 5P	1	
P4213		VJP1231T	CONNECTOR(MALE) 4P	1	
P4214		VJP1233T	CONNECTOR(MALE) 6P	1	
P4215		VJP1231T	CONNECTOR(MALE) 4P	1	
P4216		VJP1235T	CONNECTOR(MALE) 8P	1	
P4217		VJP1230T	CONNECTOR(MALE) 3P	1	
Q1		UN2213	TRANSISTOR-RESISTOR	1	PART OF VEP80218A
Q1		2SB710A	TRANSISTOR	1	(S)PART OF VEP80217
Q1		2SD1328	TRANSISTOR CHIP	1	(S)PART OF VEP84015
Q1		2SD601	TRANSISTOR CHIP	1	(R)PART OF VEP84079
Q2		UN2113	TRANSISTOR-RESISTOR	1	PART OF VEP80218A
Q2		UN2213	TRANSISTOR-RESISTOR	1	PART OF VEP84100A
Q2		2SD1149	TRANSISTOR	1	PART OF VEP84015B
Q2		2SD601	TRANSISTOR CHIP	1	(R)PART OF VEP84079
Q2		2SD602A	TRANSISTOR CHIP	1	(R)PART OF VEP80217
Q3		2SB709	TRANSISTOR CHIP	1	(R)PART OF VEP84079
Q3		2SD1149	TRANSISTOR	1	PART OF VEP84015B
Q3		2SD1328	TRANSISTOR	1	PART OF VEP80218A
Q3		2SD602	TRANSISTOR	1	
Q4		2SB709	TRANSISTOR CHIP	1	(R)PART OF VEP84015
Q4		2SB709	TRANSISTOR CHIP	1	(R)PART OF VEP84079
Q4		2SB710	TRANSISTOR CHIP	1	(R)PART OF VEP80217
Q5		2SD601	TRANSISTOR CHIP	1	(R)PART OF VEP84015
Q5		2SD601	TRANSISTOR CHIP	1	(R)PART OF VEP84099
Q5		2SD602	TRANSISTOR	1	PART OF VEP80217B
Q6		2SB710	TRANSISTOR CHIP	1	(R)PART OF VEP80217
Q6		2SD601	TRANSISTOR CHIP	1	(R)PART OF VEP84079
Q7,Q8		2SB709	TRANSISTOR CHIP	2	(R)PART OF VEP84079
Q4003		2SD601	TRANSISTOR CHIP	1	(R)
Q4004		UN2113	TRANSISTOR-RESISTOR	1	
Q4005,06		UN2213	TRANSISTOR-RESISTOR	2	
Q4007		UN2113	TRANSISTOR-RESISTOR	1	
Q4008-10		UN2213	TRANSISTOR-RESISTOR	3	
Q4013		2SD601	TRANSISTOR CHIP	1	(R)
Q4014		UN2113	TRANSISTOR-RESISTOR	1	
Q4015		UN2213	TRANSISTOR-RESISTOR	1	
Q4021		UN2213	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q4022,23		2SK146	TRANSISTOR	2	(B,L)
Q4024		2SB779	TRANSISTOR CHIP	1	(R)
Q4025,26		2SC1384	TRANSISTOR	2	(Q,R)
Q4027		2SD601	TRANSISTOR CHIP	1	(R)
Q4028		2SB779	TRANSISTOR CHIP	1	(R)
Q4029,30		2SC1384	TRANSISTOR	2	(Q,R)
Q4032,33		2SC1318	TRANSISTOR	2	
Q4034,35		2SD601	TRANSISTOR CHIP	2	(R)
Q4036,37		UN2213	TRANSISTOR-RESISTOR	2	
Q4041		UN2213	TRANSISTOR-RESISTOR	1	
Q4042		2SD601	TRANSISTOR CHIP	1	(R)
Q4043,44		2SD1328	TRANSISTOR	2	
Q4045		2SB710	TRANSISTOR CHIP	1	(R)
Q4046		UN2113	TRANSISTOR-RESISTOR	1	
Q4047		UN2213	TRANSISTOR-RESISTOR	1	
Q4048		UN2113	TRANSISTOR-RESISTOR	1	
Q4049,50		UN2213	TRANSISTOR-RESISTOR	2	
Q4051,52		UN2113	TRANSISTOR-RESISTOR	2	
Q4056,57		UN2213	TRANSISTOR-RESISTOR	2	
Q4203-05		2SD601	TRANSISTOR CHIP	3	(R)
Q4206		UN2213	TRANSISTOR-RESISTOR	1	
Q4209-11		2SD601	TRANSISTOR CHIP	3	(R)
Q4212		UN2213	TRANSISTOR-RESISTOR	1	
Q4213		UN2113	TRANSISTOR-RESISTOR	1	
Q4217		2SC2404	TRANSISTOR CHIP	1	(C)
Q4218		2SD601	TRANSISTOR CHIP	1	(R)
Q4221		UN2213	TRANSISTOR-RESISTOR	1	
Q4233		UN2213	TRANSISTOR-RESISTOR	1	
Q4234		2SD601	TRANSISTOR CHIP	1	(R)
Q4235		UN2112	TRANSISTOR-RESISTOR	1	
Q4236		UN2213	TRANSISTOR-RESISTOR	1	
Q4237,38		2SD1328	TRANSISTOR CHIP	2	(S,T)
Q4239		UN2213	TRANSISTOR-RESISTOR	1	
Q4240		2SD602A	TRANSISTOR CHIP	1	(R)
Q4241		2SB710A	TRANSISTOR CHIP	1	(R)
			RESISTORS		
R1		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	PART OF VEP84015B
R1		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	PART OF VEP80218A
R1		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	PART OF VEP84100A
R1		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	PART OF VEP80217B
R1		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	PART OF VEP84079A
R2		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84079A
R2		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	PART OF VEP80218A
R2		ERJ6GEYJ184	M.RESISTOR CH 1/10W 180K	1	PART OF VEP84100A
R2		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R2		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	PART OF VEP84015B
R3		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84100A
R3		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R3		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	PART OF VEP84079A
R3		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	PART OF VEP80218A
R3		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	PART OF VEP84015B
R4		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84079A
R4		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	PART OF VEP84100A
R4		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	PART OF VEP84015B
R4		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R5		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R5		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	PART OF VEP84015B
R5		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	PART OF VEP84100A
R5		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	PART OF VEP84079A
R6		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	PART OF VEP84079A
R6		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	PART OF VEP84015B
R6		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	PART OF VEP84100A
R7		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	PART OF VEP84079A
R7		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R7		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	PART OF VEP84100A
R8		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	PART OF VEP84079A
R8		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	PART OF VEP84100A
R8		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R9		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84079A
R9		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R9		ERJ6GEYJ184	M.RESISTOR CH 1/10W 180K	1	PART OF VEP84100A
R10		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84100A
R10		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	PART OF VEP84079A
R11		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R11		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	PART OF VEP84079A
R11		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	PART OF VEP84100A
R12		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R12		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	PART OF VEP84100A
R12		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	PART OF VEP84079A
R13		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	PART OF VEP80217B
R13		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	PART OF VEP84079A
R13		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	PART OF VEP84100A
R14		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	PART OF VEP80217B
R14		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	PART OF VEP84079A
R14		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	PART OF VEP84100A
R15		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84079A
R15		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	PART OF VEP80217B
R15		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	PART OF VEP84100A
R16		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	PART OF VEP80217B
R16		ERJ6GEYJ184	M.RESISTOR CH 1/10W 180K	1	PART OF VEP84100A
R16		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	PART OF VEP84079A
R17		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84079A
R17		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84100A
R17		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R18		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	PART OF VEP84079A
R18		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	PART OF VEP84100A
R18		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R19		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	PART OF VEP84079A
R19		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	PART OF VEP84100A
R20		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	PART OF VEP84079A
R20		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	PART OF VEP84100A
R21		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	PART OF VEP84079A
R21		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	PART OF VEP84100A
R22		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84079A
R22		ERJ6GEYJ184	M.RESISTOR CH 1/10W 180K	1	PART OF VEP84100A
R23		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	PART OF VEP84100A
R23		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R24		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	PART OF VEP84100A
R24		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	PART OF VEP84079A
R25		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	PART OF VEP84100A
R25		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	PART OF VEP84079A
R26		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	PART OF VEP84079A
R26		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	PART OF VEP84100A
R27		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	PART OF VEP84079A
R27		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	PART OF VEP84100A
R28		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	PART OF VEP84079A
R28		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	PART OF VEP84100A
R29		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R30		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4001-03		VRE0034E821	M.RESISTOR CH 1/10W 820	3	
R4004		VRE0034E101	M.RESISTOR CH 1/10W 100	1	
R4005		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4008		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4009		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4010		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R4011		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4012		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4013		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4014		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4015		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R4016		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4018		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R4020		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4021		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R4022		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4023		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4024		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4025		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4026		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4027		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4028-30		VRE0034E821	M.RESISTOR CH 1/10W 820	3	
R4031		VRE0034E101	M.RESISTOR CH 1/10W 100	1	
R4032		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4033		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R4034		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4037		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R4038		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4039		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4040		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4041		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4042		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4043		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R4044		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4046		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4048		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4049		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R4050		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4051		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4052		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R4053		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4054		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4055		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4056,57		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R4058		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4059		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4060		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4061		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4063,64		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R4072		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4073		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4074		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4075		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4076		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4077		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4093		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4094		ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R4098		ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1	
R4104		ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R4108		ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1	
R4114,15		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R4120		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4121,22		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	2	
R4123		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4124,25		ERDS2TJ8R2	C.RESISTOR 1/4W 8.2	2	
R4126		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4127		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4128,29		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4130		ERDS2TJ1R0	C.RESISTOR 1/4W 1.0	1	
R4131		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R4139,40		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R4141,42		ERDS2T0	C.RESISTOR 1/4W 0	2	
R4143,44		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	2	
R4149		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4150,51		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R4154,55		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R4156.57		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4158,59		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4160		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4161		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R4162		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4163		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4164,65		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R4166,67		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4168,69		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	2	
R4170		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R4171		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4172,73		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4174,75		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R4178,79		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R4182,83		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	2	
R4184,85		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4186		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4187		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4189		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4190		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4191		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4192		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4193		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4194,95		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4198		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R4199		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4201		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4202		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4203		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4204		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4205		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4206		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4207		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4208		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4209		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4210		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R4211		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4212		VRE0034E682	M.RESISTOR CH 1/10W 6.8K	1	
R4214		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4216		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4217		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4219		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4220		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4221		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4222		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4223		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4224		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4225		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4226		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4228		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4229		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4230		VRE0034E332	M.RESISTOR CH 1/10W 3.3K	1	
R4232		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4234		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4236		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4239		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4240		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4241		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4242		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R4243		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R4244		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4245		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R4246		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4247		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4256		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4268		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R4269		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4273		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R4274		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4278		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4279		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4280		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4281		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4282		ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R4286		ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1	
R4292		ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R4296		ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1	
R4302		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4304,05		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R4306		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R4307		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4308,09		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4311,12		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R4313		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4314,15		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R4316		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4317		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4318,19		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R4320,21		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4322		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4323,24		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	2	
R4327,28		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R4329,30		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4403		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4407		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4501		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4502		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4508,09		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R4511		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4514		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4516		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4517,18		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4519,20		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R4521		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4522		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R4524		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4525,26		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	2	
R4527		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R4528,29		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
RY3		VSY2036	RELAY	1	
RY4001,02		VSY2036	RELAY	2	
SW4001		VSS0208	SWITCH	1	
SW4002		VSS0207	SWITCH	1	
SW4201		VSS0208	SWITCH	1	
T4001,02		ELL12R201	TRANS.	2	
VC4001,02		ECV1ZW40X53T	V.CAPACITOR 40P	2	
VC4003		ECV1ZW60X53T	V.CAPACITOR 60P	1	
VC4004,05		ECV1ZW40X53T	V.CAPACITOR 40P	2	
VR1		VRV0062B502	V.RESISTOR 5K	1	PART OF VEP84079A
VR1		VRV0062B503	V.RESISTOR 50K	1	PART OF VEP84100A
VR2		VRV0062B502	V.RESISTOR 5K	1	PART OF VEP84079A
VR2-R4		VRV0062B503	V.RESISTOR 50K	3	PART OF VEP84100A
VR4001		VRV0109B502	V.RESISTOR 5K	1	
VR4002		VRV0109B103	V.RESISTOR 10K	1	
VR4003		VRV0109B203	V.RESISTOR 20K	1	
VR4004		VRV0109B503	V.RESISTOR 50K	1	
VR4005		VRV0062B501	V.RESISTOR 500	1	
VR4006		VRV0109B502	V.RESISTOR 5K	1	
VR4007		VRV0110B103	V.RESISTOR 10K	1	
VR4008		VRV0109B502	V.RESISTOR 5K	1	
VR4009		VRV0109B103	V.RESISTOR 10K	1	
VR4010		VRV0109B203	V.RESISTOR 20K	1	
VR4011		VRV0109B503	V.RESISTOR 50K	1	
VR4012		VRV0062B501	V.RESISTOR 500	1	
VR4013		VRV0062B502	V.RESISTOR 5K	1	
VR4014		VRV0110B103	V.RESISTOR 10K	1	
VR4018,19		VRV0110B503	V.RESISTOR 50K	2	
VR4020		VRV0109B103	V.RESISTOR 10K	1	
VR4021,22		VRV0110B203	V.RESISTOR 5K	2	
VR4023,24		VRV0062B103	V.RESISTOR 10K	2	
VR4201		VRV0062B502	V.RESISTOR 5K	1	
VR4202		VRV0062B103	V.RESISTOR 10K	1	
VR4203		VRV0062B202	V.RESISTOR 2K	1	
VR4204		VRV0109B502	V.RESISTOR 5K	1	
VR4205		VRV0109B103	V.RESISTOR 10K	1	
VR4206		VRV0109B502	V.RESISTOR 5K	1	
VR4207		VRV0110B502	V.RESISTOR 5K	1	
VR4208,09		VRV0110B203	V.RESISTOR 5K	2	
VR4210,11		VRV0109B203	V.RESISTOR 20K	2	
VR4212,13		VRV0110B503	V.RESISTOR 50K	2	
VR4214		VRV0109B102	V.RESISTOR 1K	1	
			MISCELLANEOUS		
		VJR0119	PIN	18	
		VJR0304	PIN	1	
		VJR0306	PIN	1	
		VJR0421	PIN	3	
		VJS1435	CONNECTOR(FEMALE)	1	
		VMP1062	P.C.B.HOLDER ANGLE	1	
		VMP1063	P.C.B.HOLDER ANGLE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VMS2875	PIN	1	
		VSC1987	SHIELD CASE	3	
		VSC1988	SHIELD CASE	1	
		VSC1989	SHIELD CASE	1	
		VSC1990	SHIELD CASE	1	
		VSC3246	SHIELD CASE	1	
		XTV3+6FR	SCREW	6	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP04164C	P.C.BOARD W/COMPONENT		
			AUDIO MAIN SUB 1		
	■	VEP84012C	P.C.BOARD W/COMPONENT		
			AUDIO MAIN SUB 2		
	■	VEP81016F	P.C.BOARD W/COMPONENT		
			POWER		
			CAPACITORS		
C1001-03		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	3	
C1004		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C1005		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C1006		ECUX1H471JN	C.CAPACITOR CH 50V 470P	1	
C1007		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1008		ECUX1H471KBN	C.CAPACITOR CH 50V 470P	1	
C1009		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1010		ECEA1EU102	E.CAPACITOR 25V 1000U	1	
C1011		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C1012		ECQM1H333JV	P.CAPACITOR 50V 0.033U	1	
C1013,14		ECUX1H391JN	C.CAPACITOR CH 50V 390P	2	
C1015		ECEA1AU222	E.CAPACITOR 10V 2200U	1	
C1016		ECEA1AU331	E.CAPACITOR 10V 330U	1	
C1017		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1018		ECUX1H391JN	C.CAPACITOR CH 50V 390P	1	
C1019		ECEA1AU471	E.CAPACITOR 10V 470U	1	
C1020		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C1021		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C1022		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C1023		ECUX1H471JN	C.CAPACITOR CH 50V 470P	1	
C1024		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1025		ECQM1H102JV	P.CAPACITOR 50V 1000P	1	
C1026		ECUX1H471KBN	C.CAPACITOR CH 50V 470P	1	
C1027		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1028		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1029		ECUX1H391JN	C.CAPACITOR CH 50V 390P	1	
C1030		ECEA1AU471	E.CAPACITOR 10V 470U	1	
C1032		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1033		ECUX1H391JN	C.CAPACITOR CH 50V 390P	1	
C1034		ECEA1AU222	E.CAPACITOR 10V 2200U	1	
C1035		ECEA1AU331	E.CAPACITOR 10V 330U	1	
C1036		ECEA1ESS471	E.CAPACITOR 25V 470U	1	
C4901		ECEA1CKN330	E.CAPACITOR 16V 33U	1	
C4902		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4903		ECEA1CU101	E.CAPACITOR 16V 100U	1	
C4904		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4905		ECEA1CU101	E.CAPACITOR 16V 100U	1	
C4906		ECEA1CKN330	E.CAPACITOR 16V 33U	1	
C4907		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4908		ECEA1CU101	E.CAPACITOR 16V 100U	1	
C4909		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4910		ECEA1CU101	E.CAPACITOR 16V 100U	1	
C4911		ECEA1CKN330	E.CAPACITOR 16V 33U	1	
C4912		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4913		ECEA1CU101	E.CAPACITOR 16V 100U	1	
C4914		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4915		ECEA1CU101	E.CAPACITOR 16V 100U	1	
C4916		ECEA1CKN330	E.CAPACITOR 16V 33U	1	
C4917		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4918		ECEA1CU101	E.CAPACITOR 16V 100U	1	
C4919		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C4920		ECEA1CU101	E.CAPACITOR 16V 100U	1	
C4921,22		ECEA1CK470	E.CAPACITOR 16V 47U	2	
D1001,02		MA151K	DIODE	2	
D1003,04		21DQ04	DIODE	2	
D1005		11DQ04	DIODE	1	
D1006		MA151K	DIODE	1	
D1007		11DQ04	DIODE	1	
D1008,09		21DQ04	DIODE	2	
D1010,11		MA4200M	DIODE	2	
D1013		S3V40	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC1001,02		TL1451CNS	IC	2	
IC1003		NJM2903M	IC	1	
IC4901-08		NE5534D	IC	8	
L1001		VLQ0215	COIL	1	
L1002		VLQ0216	COIL	1	
L1003		VLQ0214	COIL 50UH	1	
L1005		ELC10B006	COIL 150UH	1	
L1006		VLQ0214	COIL 50UH	1	
L1007		VLQ0129	COIL 300UH	1	
L1008		ELC08G003	COIL	1	
L1010		VLQ0216	COIL	1	
L1011		VLQ0257	COIL	1	
P271		VJP1236T	CONNECTOR(MALE) 9P	1	
P272		VJP1239T	CONNECTOR(MALE) 12P	1	
P273		VJP1230R	CONNECTOR(MALE) 3P	1	
P1101		VJP1239T	CONNECTOR(MALE) 12P	1	
P1102		VJP1238T	CONNECTOR(MALE) 11P	1	
P1103		VJP1393T	CONNECTOR(MALE) 13P	1	
P1104		VJP1237T	CONNECTOR(MALE) 10P	1	
P1108,09		VJP1230T	CONNECTOR(MALE) 3P	2	
P1111		VJP1324	CONNECTOR(MALE)	1	
Q1001		2SB951	TRANSISTOR	1	(Q,R)
Q1002		2SD601	TRANSISTOR CHIP	1	(R)
Q1003,04		2SB709	TRANSISTOR CHIP	2	(R)
Q1005,06		2SK742	TRANSISTOR	2	
Q1007		2SB945	TRANSISTOR	1	(Q,R)
Q1008		2SB710	TRANSISTOR CHIP	1	(R)
Q1009		2SB945	TRANSISTOR	1	(Q,R)
Q1010		2SB710	TRANSISTOR CHIP	1	(R)
Q1011		2SB948A	TRANSISTOR	1	(Q,R)
Q1012		2SB710	TRANSISTOR CHIP	1	(R)
Q1013-15		UN2113	TRANSISTOR-RESISTOR	3	
Q1016		2SB709	TRANSISTOR CHIP	1	(R)
Q1017		2SD601	TRANSISTOR CHIP	1	(R)
Q4901		2SD1328	TRANSISTOR CHIP	8	(R,S)
			RESISTOR		
R1001,02		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R1003		ERJ8GEYJ102	M.RESISTOR CH 1/8W 1K	1	
R1004		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	
R1005		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R1006,07		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	2	
R1008		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R1009		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R1010,11		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	2	
R1012		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1013,14		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R1015		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R1016		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R1017		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R1018,19		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R1020,21		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	2	
R1022		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R1023		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R1024		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R1026		ERG1SJ680	M.RESISTOR 1W 68	1	
R1027		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R1028		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1029		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R1030-33		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	4	
R1034		ERJ6GEYJ183	M.RESISTOR CH 1/10W 180K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1035		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R1036		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R1037		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R1038		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R1039		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R1040		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R1041		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R1042		ERG12SJ101	M.RESISTOR CH 1/10W 100	1	
R1043		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R1044		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1045		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R1046		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R1047		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R1048		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R1049		ERG1SJ470	M.RESISTOR CH 1/10W 47	1	
R1050		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R1051		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1052		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R1053,54		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R1055,56		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	2	
R1057		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R1058		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R1059		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R1060		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R1061,62		ERJ8GCYJ102	M.RESISTOR CH 1/8W 1K	2	
R4901		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4902		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4903		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4904		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4905		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4906,07		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4908,09		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4910		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4911		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4912		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4913,14		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4915		ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R4916		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4917		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4918		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4919		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4920		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4921,22		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4923,24		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4925		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4926		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4927		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4928,29		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4930		ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R4931		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4932		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4933		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4934		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4935		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4936,37		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4938,39		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4940		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4941		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4942		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4943,44		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4945		ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R4946		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4947		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4948		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4949		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4950		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4951,52		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4953,54		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R4955		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R4956		ERJ6GEYJ470	M.RESISTOR CH 1/10W 47	1	
R4957		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4958,59		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R4960		ERJ6GEYG912	M.RESISTOR CH 1/10W 9.1K	1	
R4961-64		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	4	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
T1001		VLT0291	TRANSFORMER	1	
VR1001-04		VRV0109B502	V.RESISTOR 5K	4	
VR4901-04		VRV0109B502	V.RESISTOR 5K	4	
			MISCELLANEOUS		
		VSC1981	SHIELD CASE	1	
		XNG3CS	NUT	6	
		XSS3+8S	SCREW	6	
	■	VEP81039A	P.C.BOARD W/COMPONENT		
			POWER SUB		
			CAPACITORS		
C1501		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C1502		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C1503		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C1504		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1505		ECUX1H471JN	C.CAPACITOR CH 50V 470P	1	
C1506		ECUM1H102JN	C.CAPACITOR CH 50V 1000P	1	
C1507		ECUX1H471JN	C.CAPACITOR CH 50V 470P	1	
C1508		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1509		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C1510		ECEA1EFE151	E.CAPACITOR 25V 150U	1	
C1511		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C1512		ECUX1H391JN	C.CAPACITOR CH 50V 390P	1	
C1513		ECEA1JFE270	E.CAPACITOR 63V 27U	1	
C1514		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C1515		ECEA1JFE270	E.CAPACITOR 63V 27U	1	
C1516		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C1517		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C1518		ECUX1H391JN	C.CAPACITOR CH 50V 390P	1	
C1519,20		ECEA1CKE101	E.CAPACITOR 16V 100U	2	
C1521		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C1522		ECEA1CKE101	E.CAPACITOR 16V 100U	1	
C1523		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C1524		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C1525		ECEA1EU470	E.CAPACITOR 25V 47U	1	
C1526		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C1527		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C1528		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C1529		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
D1501		MA151K	DIODE	1	
D1502,03		E10QS10	DIODE	2	
D1504,05		MA4220M	DIODE	2	
IC1501		TL1451CNS	IC	1	
L1501		ELC08G003	COIL	1	
L1502		VLQ0392K272	COIL 2.7UH	1	
L1503		VLP0017	COIL	1	
L1504		ELC08G003	COIL	1	
L1505		VLP0017	COIL	1	
L1506		VLQ0129	COIL 300UH	1	
L1507		ELC08G003	COIL	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P106		VJP1232T	CONNECTOR(MALE) 5P	1	
P107		VJP1230T	CONNECTOR(MALE) 3P	1	
Q1501,02		2SB709	TRANSISTOR CHIP	2	(R)
Q1503		2SK1060	TRANSISTOR	1	
Q1504		2SB709	TRANSISTOR CHIP	1	(R)
Q1505		2SB1175	TRANSISTOR	1	
Q1506		2SD601	TRANSISTOR CHIP	1	(R)
Q1507		2SC2885	TRANSISTOR	1	
			RESISTORS		
R1501		ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R1502		ERJ6GEYG113	M.RESISTOR CH 1/10W 11	1	
R1503,04		VRE0034E473	M.RESISTOR CH 1/10W 47K	2	
R1505		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R1506		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R1507		ERJ6GEYG432	M.RESISTOR CH1/10W 4.3K	1	
R1508		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R1509		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R1510		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R1511		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R1512		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R1513		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R1514		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R1515		VRE0034E563	M.RESISTOR CH 1/10W 56K	1	
R1516		VRE0034E152	M.RESISTOR CH 1/10W 1.5K	1	
R1517		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R1518		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R1519		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R1520,21		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R1522		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R1523		VRE0034E473	M.RESISTOR CH 1/10W 47K	1	
R1524		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R1525,26		VRE0034E473	M.RESISTOR CH 1/10W 47K	2	
R1527		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R1528		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1529		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
	■	VEP86074A	P.C.BOARD W/COMPONENT		
			FRONT 1		
BAT6001		VSB0140	BATTERY	1	
			CAPACITORS		
C6001		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6002-04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C6005		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C6006		ECUN1H020CCN	C.CAPACITOR CH 50V 2P	1	
C6007		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6008		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C6009		ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	1	
C6010		ECEA1AKS330	E.CAPACITOR 10V 33U	1	
C6011		ECEA1AKS100	E.CAPACITOR 10V 10U	1	
C6012		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
D6001-15		BR3668S	DIODE	15	
D6016-29		MA151K	DIODE	14	
D6030		HZ2ALL	DIODE	1	
D6032		LN0315CP4	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D6033		LN322GP	DIODE	1	
D6034		MA151K	DIODE	1	
D6035		LN222RP	DIODE	1	
D6036		MA700A	DIODE	1	
IC6001		UPD7503GB26	IC	1	
IC6002		MN74HC03S	IC	1	
LCD6001		EDD053K56A4P	LCD	1	
P114		VJP1557	CONNECTOR(MALE)	1	
P701		VJP1233T	CONNECTOR(MALE) 6P	1	
P702		VJP1233R	CONNECTOR(MALE) 6P	1	
P703		VJP1237T	CONNECTOR(MALE) 10P	1	
P704		VJP1235T	CONNECTOR(MALE) 8P	1	
P705		VJP1229T	CONNECTOR(MALE) 2P	1	
P805		VJS1435	CONNECTOR(FEMALE)	1	
P809		VJP1231T	CONNECTOR(MALE) 4P	1	
Q6001		2SB709	TRANSISTOR CHIP	1	(R)
Q6002		2SD601	TRANSISTOR CHIP	1	(R)
Q6003		2SB710	TRANSISTOR CHIP	1	(R)
Q6004		2SD601	TRANSISTOR CHIP	1	(R)
Q6005		UN2115	COMBINATION PARTS	1	
			RESISTORS		
R6001		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R6002		ERJ6GEYJ680	M.RESISTOR CH 1/10W 68	1	
R6003		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R6004-06		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	3	
R6008		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R6009		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R6010-12		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	3	
R6013		ERJ6GEYG164	M.RESISTOR CH 1/10W 160K	1	
R6014		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6015		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R6016		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R6017		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6018		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R6019		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R6020		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R6021		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R6022,23		ERDS2TJ681	C.RESISTOR 1/4W 680	2	
R6024		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R6025		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R6026,27		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	2	
R6028		ERJ8GCYJ331	M.RESISTOR CH 1/8W 33K	1	
R6035		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R6036,37		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	2	
R6038		ERJ8GCYJ331	M.RESISTOR CH 1/8W 33K	1	
S6001-09		EVQQS205K	SWITCH	9	
S6010		VSS0143	SWITCH	1	
S6011-14		EVQQS205K	SWITCH	4	
S6015		VSS0126	SWITCH	1	
S6016		VSS0143	SWITCH	1	
S6017		VSS0126	SWITCH	1	
S6019		VSS0126	SWITCH	1	
S6020		VSS0143	SWITCH	1	
S6021		VSS0126	SWITCH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
VC6001		ECRHA030E41	TRIMMER 3P	1	
X6001		VSX0254	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VGQ1200	LED HOLDER	1	
		VGQ1882	LED HOLDER	1	
		VJS1940	CONNECTOR(FEMALE)	1	
		VMX1178	DISPLAY SPACER	3	
		VMX1223	DISPLAY SPACER	15	
		VMX1658	DISPLAY SPACER	2	
		XSB3+6S	SCREW	3	
	■	VEP86077A	P.C.BOARD W/COMPONENT		
			FRONT 2		
	■	VEP80544A	P.C.BOARD W/COMPONENT		PART OF VEP86077A
			FRONT 2 SUB		
			CAPACITORS		
C6601,02		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	2	
C6604		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6605,06		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C6607		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6608,09		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	2	
C6610-12		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C6613,14		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C6615-17		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C6619		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6624		ECEA1CKS4R7	E.CAPACITOR 16V 4.7U	1	
C6625		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6626,27		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C6629		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6632		ECEA0JU331	E.CAPACITOR 6.3V 330U	1	
C6633		ECEA1CKN4R7	E.CAPACITOR 16V 4.7U	1	
C6635		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6636		ECEA1CKN4R7	E.CAPACITOR 16V 4.7U	1	
C6637		ECUM1E223KBN	C.CAPACITOR CH 25V 0.023U	1	
C6638		ECEA1ASN100	E.CAPACITOR 10V 10U	1	
C6639		ECEA1AKS330	E.CAPACITOR 10V 33U	1	
C6640		ECUX1H560JCN	C.CAPACITOR CH 50V 56P	1	
C6641		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C6642		ECEA0GKS221	E.CAPACITOR 4V 220U	1	
C6643		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C6644		ECEA1CKS4R7	E.CAPACITOR 16V 4.7U	1	
C6645		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6646		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C6647-51		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	5	
C6652		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C6653,54		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C6657		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C6658		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6660-62		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C6663		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C6664		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C6665,66		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C6667		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C6668		ECEA1VKS3R3	E.CAPACITOR 35V 3.3U	1	
C6669		ECUM1H030DCN	C.CAPACITOR CH 50V 3P	1	
C6670		ECQM1H222JV	P.CAPACITOR 50V 2200P	1	
C6671		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C6672		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6701		ECQM1H182JV	P.CAPACITOR 50V 1800P	1	
C6702		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C6703,04		ECEA1AKN470	E.CAPACITOR 10V 47U	2	
C6705		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C6706,07		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C6709		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
D6701		MA151WK	DIODE	1	
D6702		MA151WA	DIODE	1	
FL6601		EIR7QE016B	FILTER	1	
IC6601		UPD78C10GF	IC	1	
IC6602		MN51040VPC	IC	1	
IC6603		MN1237A	IC	1	
IC6604		MN74HC374S	IC	1	
IC6605		MN74HCU04S	IC	1	
IC6606		MN74HC32S	IC	1	
IC6607,08		NJM319M	IC	2	
IC6609		UPC1519HA	IC	1	
IC6610		NJM082BM	IC	1	
IC6612		BA301	IC	1	
IC6613		MN4053BS	IC	1	
IC6614		MN74HC373S	IC	1	
IC6615		VSI0375C	IC	1	
IC6616		MN74HC32S	IC	1	
IC6617		MN74HC374S	IC	1	
IC6618		NJM2903M	IC	1	
IC6619		M51951AML	IC	1	
IC6620		MN74HC00S	IC	1	
IC6701		NJM2904M	IC	1	
IC6702		NJM4560MD	IC	1	
L6601		VLQEL05F221J	COIL 220UH	1	
P801		VJP1245T	CONNECTOR(MALE) 5P	1	
P802		VJP1251T	CONNECTOR(MALE) 11P	1	
P803		VJP1249T	CONNECTOR(MALE) 9P	1	
P804		VJP1435	CONNECTOR	1	
P806		VJP1245T	CONNECTOR(MALE) 5P	1	
P807		VJP1243T	CONNECTOR(MALE) 3P	1	
P808		VJP1246R	CONNECTOR (MALE)	1	
Q6601		UN2213	TRANSISTOR-RESISTOR	1	
Q6602		2SD1328	TRANSISTOR CHIP	1	
Q6603		2SD601	TRANSISTOR CHIP	1	(R)
			RESISTORS		
R6602		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R6604,05		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R6606		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R6607		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R6615		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R6617		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R6618		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R6619		ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R6620		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R6621-23		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R6624		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R6625		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R6626		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R6627		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6628		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6629		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R6630		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6635		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6636		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6637		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R6638		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6639		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R6640		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6641		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R6642		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R6643		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R6644		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6645		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R6646		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R6647		ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R6648		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R6649,50		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R6651		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R6652		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6656		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6663		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6664		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R6665		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R6666		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R6669		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R6670		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R6672-74		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R6675		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R6676		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R6677,78		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	2	
R6679		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R6680		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R6681-88		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	8	
R6689		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R6690		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R6691		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6701		ERJ6GEYJ114	M.RESISTOR CH 1/10W 110K	1	
R6702,03		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R6704		ERJ6GEYJ114	M.RESISTOR CH 1/10W 110K	1	
R6705,06		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R6707		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R6708,09		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	2	
R6710,11		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	2	
SW6601		VJP2058	CONNECTOR (MALE)	1	
X6601		VSX0209	CRYSTAL OSCILLATOR	1	
X6602		VSX0178	CRYSTAL OSCILLATOR	1	
X6603		VSX0284	CRYSTAL OSCILLATOR	1	
X6604		VSX0098	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJR0119	PIN	6	
		VJS1940	CONNECTOR(FEMALE)	3	
		XSB3+6S	SCREW	3	
	■	VEP80092A	P.C.BOARD W/COMPONENT		
			FRONT 3		
P706		VJP1232T	CONNECTOR(MALE) 5P	1	
P708		VJP1229T	CONNECTOR(MALE) 2P	1	
S701-03		VSS0143	SWITCH	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP80541A	P.C.BOARD W/COMPONENT		
			FRONT 4		
D701-04		LN0214CP4	LED	4	
P281		VJP1230T	CONNECTOR(MALE) 3P	1	
P707,08		VJP1230T	CONNECTOR(MALE) 3P	2	
			RESISTORS		
R701-04		ERDS2TJ471	C.RESISTOR 1/4W 470	4	
R705		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
SW1		VSS0126	SWITCH	1	
	■	VEP80199A	P.C.BOARD W/COMPONENT		
			HOUR METER		
P714		VJP1243T	CONNECTOR(MALE)	1	
	■	VEP80093A	P.C.BOARD W/COMPONENT		
			VR 1		
P710		VJP1243T	CONNECTOR(MALE)	1	
P711		VJP1243T	CONNECTOR(MALE)	1	
VR701		EVULNA021A14	V.RESISTOR 10K	1	
VR702		EVULRA021B14	V.RESISTOR 10K	1	
VR703		EVULNA021A14	V.RESISTOR 10K	1	
VR704		EVULRA021B14	V.RESISTOR 10K	1	
	■	VEP80094B	P.C.BOARD W/COMPONENT		
			VR 2		
P712		VJP1234T	CONNECTOR(MALE)	1	
P713		VJP1234T	CONNECTOR(MALE)	1	
VR705		EVULNA021A14	V.RESISTOR 10K	1	
VR706		EVULRA021B14	V.RESISTOR 10K	1	
VR707		EVULNA021A14	V.RESISTOR 10K	1	
VR708		EVULRA021B14	V.RESISTOR 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP84086B	P.C.BOARD W/COMPONENT		
			AUDIO INPUT		
			CAPACITORS		
C4001-08		ECEA1HU220	E.CAPACITOR 50V 22U	8	
C4009-18		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	10	
C4019,20		ECEA0JKS101	E.CAPACITOR 6.3V 100U	2	
C4021,22		ECEA0JKS470	E.CAPACITOR 6.3V 47U	2	
C4023		ECEA1HU101	E.CAPACITOR 50V 100U	1	
C4024-33		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	10	
IC4001-05		NJM2068MD	IC	5	
L4001-12		VLQ0256	COIL	12	
P231		VJP1230T	CONNECTOR(MALE) 3P	1	
P232		VJP1232T	CONNECTOR(MALE) 5P	1	
P233		VJP1235T	CONNECTOR(MALE) 8P	1	
P234		VJP1230T	CONNECTOR(MALE) 3P	1	
Q4001		2SD602A	TRANSISTOR CHIP	1	(R)
Q4002		2SB710A	TRANSISTOR CHIP	1	(R)
			RESISTORS		
R4001,02		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R4003		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4004		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4006		ERJ6GEYJ202	M.RESISTOR CH1/10W 2K	1	
R4007		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4008		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R4009		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R4010,11		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R4012		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4013		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4014		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4015		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4016		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R4017		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R4018		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4019		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4021,22		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R4023		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4024		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4026		ERJ6GEYJ202	M.RESISTOR CH1/10W 2K	1	
R4027		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4028		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R4029		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R4030,31		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R4032		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4033		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R4034		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4035		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4037		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4038,39		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R4040		ERJ6GEYJ680	M.RESISTOR CH 1/10W 68	1	
R4041,42		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R4043		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4044		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4046		ERJ6GEYJ202	M.RESISTOR CH1/10W 2K	1	
R4047		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4048		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R4049		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R4050,51		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R4052		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4053		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R4054		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R4055		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4057,58		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R4061,62		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	2	
R4063		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4064		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R4066		ERJ6GEYJ202	M.RESISTOR CH1/10W 2K	1	
R4067		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4068		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R4069		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R4070,71		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R4072		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4073		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R4074		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R4075		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
SW4001-04		VSS0157	SWITCH	4	
SW4005,06		VSS0228	SWITCH	2	
SW4007-09		VSS0162	SWITCH	3	
SW4010-13		VSS0126	SWITCH	4	
T4001-04		ETA14Y162AY	TRANSFORMER	4	
T4005		ETA14Y95AY	TRANSFORMER	1	
			MISCELLANEOUS		
		VSC2055	SHIELD	5	
	■	VEP84055B	P.C.BOARD W/COMPONENT		
			AUDIO MONITOR		
			CAPACITORS		
C4026		ECKF1H681KB	C.CAPACITOR 50V 680P	1	
C4801		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C4802		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4803		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C4804		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4805,06		ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C4810		ECEA1AKN100	E.CAPACITOR 10V 10U	1	
C4812,13		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4815		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C4816		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4817		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C4818		ECEA1AK101	E.CAPACITOR 10V 100U	1	
C4819		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4820		ECUX1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C4821		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C4822		ECUX1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C4823		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C4824,25		ECEA1AK470	E.CAPACITOR 10V 47U	2	
CN4801		VJR0304	TEST POINT	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D4802,03		MA153	DIODE	2	
IC4801		NJM4558M	IC	1	
IC4803		MN4011BS	IC	1	
IC4804		NJM4556MB	IC	1	
IC4805		NJM4558M	IC	1	
P225		VJP1232T	CONNECTOR(MALE) 5P	1	
P4251		VJP1236T	CONNECTOR(MALE) 9P	1	
P4252,53		VJP1231T	CONNECTOR(MALE) 4P	2	
P4254		VJP1230T	CONNECTOR(MALE) 3P	1	
Q4805,06		2SD1328	TRANSISTOR CHIP	2	(R,S)
			RESISTORS		
R4821		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R4822		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4823		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R4824		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4825		ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R4826		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4828		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4829,30		ERJ6GEYJ560	M.RESISTOR CH 1/10W 56	2	
R4835		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4836		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4837		ERJ6GEYJ560	M.RESISTOR CH 1/10W 56	1	
R4838		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4839		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R4840		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4841		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R4842		ERJ6GEYJ560	M.RESISTOR CH 1/10W 56	1	
R4843		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4844		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R4845		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R4846		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4847		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R4850-52		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	3	
R4853		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R4854		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R4876,77		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	2	
SW4801		VSS0228	SWITCH	1	
SW4805		VSS0162	SWITCH	1	
VR4001		EVUNAA047A14	V.RESISTOR 10K	1	
VR4802		VRV0109B503	V.RESISTOR 50K	1	
	■	VEP84056B	P.C.BOARD W/COMPONENT		
			AUDIO VR SUB		
P225		VJP1232T	CONNECTOR(MALE) 5P	1	
VR4001		EVUNAA047A14	V.RESISTOR 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP80455A	P.C.BOARD W/COMPONENT		
			JACK PANEL		
			CAPACITORS		
C901		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C902		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C903		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
C904		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C905		ECEA1AKA101	E.CAPACITOR 10V 100U	1	
C906		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C907,08		ECEA0JKN470	E.CAPACITOR 6.3V 47U	2	
C909		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C910		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C911		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C912-14		ECEA1AKN470	E.CAPACITOR 10V 47U	3	
D901		MA151WK	DIODE	1	
D902		MA151K	DIODE	1	
D903		MA157	DIODE	1	
L901,02		VLQEL05F220K	COIL 22UH	2	
P112		VJP1557	CONNECTOR(MALE)	1	
P901		VJP1236T	CONNECTOR(MALE) 9P	1	
P902		VJP1238T	CONNECTOR(MALE) 11P	1	
P904		VJP1233T	CONNECTOR(MALE) 6P	1	
P905		VJP1236T	CONNECTOR(MALE) 9P	1	
P906		VJP1393T	CONNECTOR(MALE) 13P	1	
P907		VJP1239T	CONNECTOR(MALE) 12P	1	
P908		VJP1237T	CONNECTOR(MALE) 10P	1	
P909		VJP1235T	CONNECTOR(MALE) 8P	1	
P912		VJP1233T	CONNECTOR(MALE) 6P	1	
P913		VJP1234T	CONNECTOR(MALE) 7P	1	
P914-16		VJP1230T	CONNECTOR(MALE) 3P	3	
P917		VJP1231T	CONNECTOR(MALE) 4P	1	
Q901,02		UN2212	TRANSISTOR-RESISTOR	2	
Q903		2SD601	TRANSISTOR CHIP	1	(R)
Q904		2SB709	TRANSISTOR CHIP	1	(R)
Q905,06		2SD601	TRANSISTOR CHIP	2	(R)
Q907		UN2212	TRANSISTOR-RESISTOR	1	
Q908-10		2SD601	TRANSISTOR CHIP	3	(R)
Q911		UN2212	TRANSISTOR-RESISTOR	1	
Q912		2SD601	TRANSISTOR CHIP	1	(Q,R)
Q913		2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q914		UN2213	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R901		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R902		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R903		ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R904-06		VRE0034E750	M.RESISTOR CH 1/10W 75	3	
R907,08		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	2	
R909		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R910		VRE0034E750	M.RESISTOR CH 1/10W 75	1	
R911		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R912		VRE0034E241	M.RESISTOR CH 1/10W 240	1	
R913		ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	1	
R914		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R915,16		VRE0034E750	M.RESISTOR CH 1/10W 75	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R918,19		VRE0034E750	M.RESISTOR CH 1/10W 75	2	
R920		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R921		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R922		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R923		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R924		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R925		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R926,27		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R928		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R929		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R930		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R931		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R932,33		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R934		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R935		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R936		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
RY901		VSY2039	RELAY	1	
SW901,02		VSS0226	SWITCH	2	
SW903		VSS0196	SWITCH	1	
SW904		VSS0228	SWITCH	1	
SW905		VSS0157	SWITCH	1	
T901		VTD0048	TRANSFORMER	1	
	■	VEP80388A	P.C.BOARD W/COMPONENT		
			HEADPHONE JACK		
L4001-03		VLQ0256	COIL	3	
	■	VEP80125A	P.C.BOARD W/COMPONENT		
			JACK VR		
P921		VJP1230G	CONNECTOR(MALE)	1	
P922		VJP1230R	CONNECTOR(MALE)	1	
VR901		EVUL7A011B54	V.RESISTOR 50K	1	
VR902		EVUL7A011B14	V.RESISTOR 10K	1	
	■	VEP80126A	P.C.BOARD W/COMPONENT		
			POWER SELECT		
S906		ESD27170	SWITCH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
	■	VEP80514B	P.C.BOARD W/COMPONENT		
			SW INTERMEDIATE		
			MISCELLANEOUS		
		VMX1331	DISPLAY SPACER	1	
		XWCV3F6G	WASHER	1	
	■	VEP05098C	P.C.BOARD W/COMPONENT		
			PLAY HEAD AMP		
			CAPACITORS		
C3001,02		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3003,04		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C3005		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3007		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C3008		ECUX1H822KBN	C.CAPACITOR CH 50V 8200P	1	
C3009		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3010,11		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3012		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3013,14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3015,16		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C3017		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3018		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3019		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C3020		ECUX1H822KBN	C.CAPACITOR CH 50V 8200P	1	
C3021		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3022,23		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3024		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C3025		VCK0035683KR	C.CAPACITOR 50V 0.068U	1	
C3026		VCK0036104KR	C.CAPACITOR 50V 0.1U	1	
C3027		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3031,32		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3035,36		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C3037		ECCF1H390JC	C.CAPACITOR 50V 39P	1	
D3001		MA151K	DIODE	1	
IC3001,02		AN6336S	IC	2	
IC3003		NJM2904M	IC	1	
L3001		VLQEL05F470K	COIL 47UH	1	
L3002,03		VLQEL05F221K	COIL 220UH	2	
L3004		VLQEL05F470J	COIL 47UH	1	
L3005,06		VLQEL05F221K	COIL 220UH	2	
L3008,09		VLQEL05F560J	COIL 56UH	2	
P351		VJP1250T	CONNECTOR(MALE) 10P	1	
Q3001,02		2SC2295	TRANSISTOR CHIP	2	(B,C)
Q3003		2SB709	TRANSISTOR CHIP	1	(R)
Q3004,05		2SC3356	TRANSISTOR	2	
Q3006		2SB709	TRANSISTOR CHIP	1	(R)
			RESISTORS		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3001		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3002		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3003		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3004		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3005		ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R3006		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3007-10		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	4	
R3011		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3012		ERJ6GEYJ270	M.RESISTOR CH 1/10W 27	1	
R3013		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3014		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3015		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3016		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3017		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3018		ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R3019		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3020		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R3021		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3022,23		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	2	
R3024		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3025		ERJ6GEYJ270	M.RESISTOR CH 1/10W 27	1	
R3026		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R3027		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R3028		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R3029		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R3030		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3031		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R3032		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R3033		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
T3001-04		EIR5QB003B	TRANSFORMER	4	
	■	VEP80508A	P.C.BOARD W/COMPONENT		
			FAN CONTROL		
			CAPACITORS		
C2712		ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
IC2708		AN78N08	IC	1	
P545		VJP1230T	CONNECTOR(MALE) 3P	1	
P546,47		VJP1243T	CONNECTOR(MALE) 3P	2	
Q2704		2SB779	TRANSISTOR CHIP	1	(R)
Q2705		2SD601	TRANSISTOR CHIP	1	(Q.R)
			RESISTORS		
R2718		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R2719		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2720		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R2721		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R2722		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
	■	VEP80139A	P.C.BOARD W/COMPONENT		
			MECHANICAL INTERMEDIATE 1		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			MISCELLANEOUS		
		VJP1229	CONNECTOR (MALE)	1	
		VJP1230	CONNECTOR (MALE)	1	
		VJP1236	CONNECTOR (MALE)	1	
		VJP1237	CONNECTOR (MALE)	1	
	■	VEP80140B	P.C.BOARD W/COMPONENT		
			MECHANICAL INTERMEDIATE 2		
			MISCELLANEOUS		
		VJP1229	CONNECTOR (MALE)	2	
		VJP1230	CONNECTOR (MALE)	1	
		VJP1231	CONNECTOR (MALE)	1	
	■	VEP80141A	P.C.BOARD W/COMPONENT		
			MECHANICAL INTERMEDIATE 3		
			MISCELLANEOUS		
		VJP1245	PIN	1	
			SERVICING FIXTURES & TOOLS		
		VFK0293	POST DRIVER	1	
		VFK0133	DIAL TORQUE GAUGE	1	
		VFK0354	DIAL TORQUE GAUGE ADAPTOR 1	1	
		VFK0134	DIAL TORQUE ADAPTOR	1	
		VFK0326	HEX, WRENCH SET	1	
		VFK0357	ECCENTRIC SCREWDRIVER	1	(1.5MM)
		VFK0132	BACK TENSION METER	1	(TENTELOMETER)
		VFK0353A	HEAD ADJ. PLATE	1	
		VFK0325	DIAL GANGE	1	
		VFK0296	RT GAP SPACER	1	